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ORIGINAL ARTICLES.

THE TUBERCULIN TEST IN INCIPIENT AND SUSPECTED PULMONARY TUBERCULOSIS.

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THE importance of making an early diagnosis in cases of tuberculosis cannot be too strongly emphasized. While studies in the autopsy-room have shown how often incipient tuberculosis is healed in man without its presence having even been suspected, clinical observation teaches daily how powerless we are to deal with the disease in its advanced stages, and how a latent pulmonary tuberculosis may be transformed into a hopeless and rapidly fatal disease when the unrecognized tuberculous process has gone on to ulceration, and when secondary infection has supervened.

The diagnosis of incipient and latent pulmonary tuberculosis, though often surrounded by many difficulties, can generally be made by a careful consideration of the history of the case, the rational symptoms, and the physical signs collectively, aided by a microscopic examination of any expectoration obtainable from the patient. Often at this stage of the disease, however, no expectoration is obtainable, or the bacillus has not yet appeared in it, and a most thorough examination of the chest and study of the symptoms fails to afford sufficient evidence to enable the examiner to reach a positive conclusion. He is therefore obliged to wait for the well-known symptoms to appear, and waiting means to jeopardize the patient's best chances of recovery. The application of the tuberculin test to such cases will often throw much needed light upon them, enabling the physician to reach a positive conclusion, and will give the patient all the chances of recovery that lie in the detection of the disease at such an early stage, before extensive lesions have developed, or secondary infection has occurred.

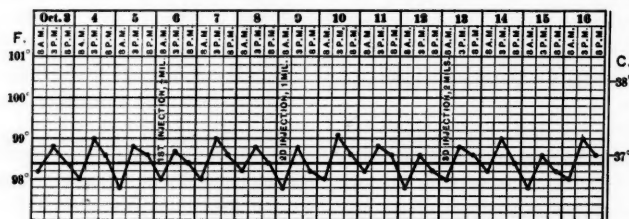
Besides its value in detecting latent tuberculosis, the tuberculin test may be found, in future, to have a wide range of usefulness, not only to the physician, but to the surgeon as well, in the differentiation of many morbid processes which simulate tuberculosis, and the nature of which cannot be positively ascertained. The differentiation of an inflammatory bronchitis of chronic type from pulmonary phthisis,

of tuberculous pleuritis from the other forms of the affection, of an unresolved pneumonic process from a cheesy pneumonia, of simple inflammatory pyelitis and cystitis from the tuberculous variety of these diseases, and of a gonorrheal or rheumatic from a tuberculous synovitis, is often very difficult, and much light as to the exact nature of the process under observation may be expected by a careful application of the tuberculin test to such cases. In view of the demonstrated accuracy of this test when applied to cattle and to other animals artificially inoculated in the course of laboratory research, where its correctness can be controlled by autopsy, it is remarkable that a method which has proved itself so generally reliable in detecting the disease in animals, and which offered such possibilities as a diagnostic agent when applied to man, should have been so almost universally neglected and generally condemned on scant evidence as utterly worthless and dangerous. This, no doubt, has been due, in a great measure, to the bitter disappointment which followed the acclamation of tuberculin as an infallible specific, and to the unquestionable evil effects of its indiscriminate and injudicious application to the treatment of human tuberculosis. To those, however, who continued quietly the study of tuberculin, it soon became apparent that while its beneficial influence as a therapeutic agent could be exercised only within certain very restricted limits, its undoubted diagnostic value steadily became more and more evident in the light of slowly accumulating experience in its use. So general in this country has been the condemnation of the use of tuberculin for any purpose, when applied to the human being, that but little evidence in regard to its diagnostic value, except as applied to cattle, has thus far been presented.

Among European observers the opinions are somewhat divided, but tend to show that while it is not infallible, it cannot any longer be ignored as an aid to diagnosis in obscure or latent cases. Von Jaksch (*Verhand. der Congress f. Innere Med.*, 1891), after using it in twenty-eight cases, concludes that tuberculin has a high diagnostic value. Guttsdat has collected figures from German clinics which show that a well-defined reaction occurred in eight per cent. of apparently healthy individuals, in ninety-five per cent. of cases known to be tuberculous, and in twenty-seven per cent. of cases sus-

pected of tuberculosis. Maragliano (*Berlin Klin. Woch.*, No. 19-20, 1896) obtained a reaction in nine per cent. of apparently sound individuals, and in twenty-three per cent. of patients suspected of tuberculosis, but without any well-defined symptoms. Maragliano carried his tests to doses as high as ten to twenty-five milligrams in cases which failed to react to smaller doses. Grasset and Vedel (*Semaine Médicale*, Feb. 26, 1896) obtained slight but nevertheless well-defined reaction in ten out of thirteen patients suffering from various maladies, the tuberculous nature of which was suspected, but could not be affirmed, while in three cases of undoubted pulmonary tuberculosis with bacilli in the expectoration no appreciable reaction occurred. Grasset and Vedel used minute doses, not exceeding .0002 to .0005. De Renzi quotes Pieper, Rietzkow, Senn, and Verneuil, who reached the conclusion that Koch's injections are not a sure method of diagnosis in tuberculosis of the internal organs, and also

when diagnosis could not be made by ordinary means, and has been limited to fourteen cases, seven of which were positive and seven negative. The highest dose given was three milligrams. In the positive cases reaction was obtained in six with a dose of two milligrams or less. In one, however, an injection of three milligrams was necessary before a well-marked and typical reaction took place. The temperature in six ranged from 100.2° to 102.5° F. at the height of the reaction, and the symptoms were of moderate intensity and soon abated. In one case only the temperature reached 104.2° F. Symptoms indicating reaction came on in six cases within twelve hours, and in one they were not well defined until twenty-two hours after the injection. In six of the cases the fever had entirely abated within twenty-eight hours; in one it lasted forty-eight hours. In all of these after the temperature returned to normal no unusual rise took place, and the general condition of the patients was within a week ap-



CASE I.

Temperature chart of patient who received three injections of tuberculin without resulting reaction.

Von Jaksch, who thinks Koch's method has a high diagnostic value. De Renzi himself says, "Nevertheless, it must be admitted that tuberculin in a majority of cases can be used as a diagnostic agent." R. Koch (*Deutsche Med. Woch.*, No. 14, Vol. I., April, 1897), in his recent publication on a "New Tuberculin," states that Dr. Nietner will soon publish the results of the application of the tuberculin test to one thousand cases.

Sarcoma, carcinoma, syphilis, and actinomycosis have been said to react to tuberculin, but in the instances quoted the presence of tuberculosis in conjunction with the above-mentioned diseases was usually not excluded. Before condemning the test as at fault when reaction occurs in apparently healthy individuals, it should be borne in mind that autopsies made on persons dying of other diseases show some unsuspected tuberculous focus to exist in from thirty to forty per cent. of those examined.

My own experience with the tuberculin test during the past five years has been principally in the direction of its occasional use to determine the presence or absence of suspected pulmonary tuberculosis

parently the same as before the tests were applied. What slight physical signs were present seemed accentuated for a time within twenty-four hours after the injection in all but two, in both of which the previous examination of the chest had proved entirely negative. In these no abnormal sounds were developed by the injections. The tests were made in one case in 1893, in two in 1894, in two in 1895, and in two in 1897. One of these patients has been lost sight of and reported as dead; the others have shown at some time or other clinical evidence of pulmonary tuberculosis.

In the seven negative cases no appreciable rise of temperature occurred. Two of the patients have passed from under observation, but the others have all remained well thus far. The test was applied in two cases in 1893, in one in 1894, in two in 1895, in two in 1897.

The history of two cases, one negative, the other positive, is briefly given, with temperature charts, as being instructive. The rational symptoms in both cases were obscure and very similar. A physical examination of the chest proved inconclusive, and in

both cases no positive diagnosis as to the presence or absence of tuberculosis could be made before the test was applied. The chart in Case 2 shows a typical tuberculin reaction occurring at the fourth injection of three milligrams, which in this case was rendered necessary, the smaller doses having given but equivocal evidence of the presence of a latent tuberculous process.

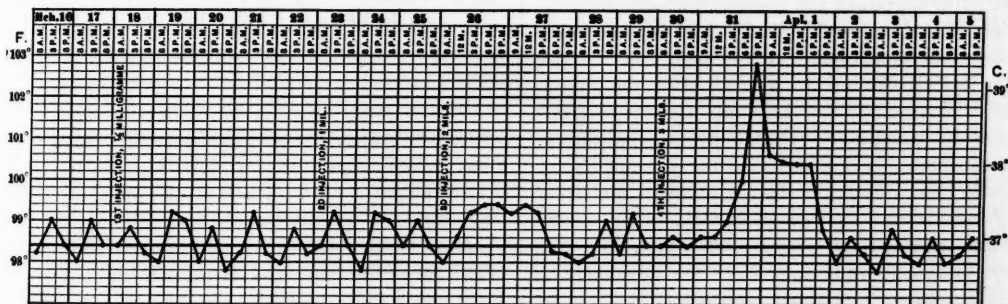
CASE I.—Miss A., aged twenty-eight years. Family history good. Has lost ten pounds during the last three months. Is somewhat anemic, tires very easily, and has had some cough with but little expectoration for the past six weeks. Appetite poor, and digestion at times troublesome. Has no fever, but has occasionally perspired a little at night. Expectoration repeatedly examined shows no bacilli. Physical examination of chest inconclusive. The vesicular murmur is very faint, and expiration somewhat prolonged at right apex. This patient was sent to the mountains as a case of suspected pulmonary tuberculosis. The test was made in 1893, and the three injections given produced absolutely no rise of temperature. The cough disappeared within two weeks, and the patient was allowed to return to New York, where she is now living in excellent health.

CASE II.—Mr. B., aged nineteen years. Father died of phthisis; two brothers and a sister are well.

little discomfort, and it will be noticed that the temperature, which stood at 99.6° F. twelve hours after the test, did not fall as usual the next morning, but remained above 99 until 6.30 P. M. As this seemed suspicious, a third injection of three milligrams was given four days later. A typical reaction ensued. At 6 P. M. he was a little chilly, had some pain in the limbs, and went to bed of his own accord. At 10 P. M. his temperature stood at 102.8° F. It fell during the night to 100.6°, but did not return to normal until 6 P. M. on the day following the injection. Within two days he said he felt as well as ever; no rise of temperature has taken place since, and he seems in his usual health. A careful examination of the chest during the reaction was negative.

In the absence of any well-defined rules founded upon the experience of others at the time I began to use the test, the method I adopted has been a purely arbitrary one and I make no claim for its being the best or the most reliable, although as far as my own personal experience goes I have as yet seen no objection to it or any reason to modify it.

The range of the patient's temperature is ascertained by taking it at 8 A. M., 3 P. M. and 8 P. M. for three or four days before making the test. The



CASE 2.

Temperature chart showing reaction after four injections of tuberculin had been given.

A year ago began to notice that he tired easily and lost some weight. Has never been up to his usual standard of health since, though he has had no marked symptoms. Has no cough except at times when he catches cold; has no expectoration except at such times. Expectoration examined then showed no bacilli. Temperature when he gets tired or has a cold reaches 99.5° to 100° F., otherwise generally normal. Had typhoid fever in 1890. Lungs examined several times by specialists, but nothing found. Came to the mountains seven months ago, and has gained nearly ten pounds. At present is up to his normal weight. Still tires easily, but is desirous of entering college if no serious disease exists. This test was made in March, 1897. The first two injections produced no effect whatever. The third, of two milligrams, was followed by a

first injection should not exceed five milligrams, and if any fever is habitually present should be even less, and is best given early in the morning or late at night as the typical reaction usually begins, in my experience, within six or twelve hours. Such a small dose, while it will often be sufficient to produce the looked-for rise of temperature, has under my observation never produced unpleasant or violent symptoms. An interval of two or three days should be allowed between each of the two or three subsequent injections it may be necessary to give, as reaction in very rare cases may be delayed for twenty-four or even thirty-six hours. On the third day a second dose of one milligram is given, and if no effect is produced, a third of two milligrams three

days later. In the great majority of cases of latent tuberculosis an appreciable reaction will be produced by the time a dose of two milligrams has been reached. If no effect has been caused by the tests applied as above I have usually gone no further, and concluded that no tuberculous process was present, or at least not to a degree which need be taken into account in advising the patient, or which would warrant insisting on a radical change in his surroundings and mode of life. If some slight symptoms, however, have been produced by a dose of two milligrams, it may be necessary to give a fourth injection of three milligrams in order to reach a positive conclusion. Nevertheless, it should be borne in mind that in a few cases the exhibition of even larger doses may cause reaction and indicate the existence of some slight latent tuberculous lesion, and the test should not, when applied within the moderate doses described, be considered absolutely infallible.

No evidence in connection with the tuberculin test as applied to man and animals has been forthcoming thus far from those who have made use of it which would tend to sustain the general impression that this method is necessarily dangerous and tends invariably to aggravate the disease, and my own experience has developed nothing which would seem to confirm this impression. It is evident that the size of the doses given has much to do with the limitations of this method for usefulness and the correctness of the conclusions reached by its application. The tuberculin used is also a matter of some importance in determining the dosage, as different samples vary considerably in their efficiency. The minute amounts adopted by Grasset and Vedel, *i.e.*, from .0002 to .0005, while they have the advantage of absolute safety, may lead into error, as they are insufficient, on the evidence of these observers themselves, to cause reaction in cases proven to be tuberculous by the presence of the bacillus in the expectoration. If, on the other hand, the test be pushed to the injection of such large amounts as 10 milligrams or more, as advocated by Maragliano, such doses are by no means free from the objection of occasionally causing unpleasant and sometimes dangerous symptoms; and even if the amount given be not carried to the dose of 10 milligrams, which is known to produce fever in healthy subjects, it is likely that, on account of individual susceptibility or the presence of some other morbid process in the body, reaction will be found to occur with the larger doses when no tuberculous process exists. The adoption of an initial dose so small as to guard against the absolute possibility of producing violent reactionary symptoms, and the graded increase of

the subsequent doses within such quantities as are known never to produce reaction in healthy individuals, would seem to afford the best protection against unpleasant results and misleading evidence.

It is greatly to be desired, however, that more light should be thrown by additional studies on these points, and that the best method to be employed in making the test and its limitations be more accurately defined by evidence derived from a more extended and varied experience in its use.

NOTE.—Since the above was written, and while it was in the publishers' hands, a paper on the Diagnostic and Therapeutic Value of Tuberculin was read by Dr. James T. Whittaker before the Association of American Physicians, and although I was not present at the meeting, and have as yet seen only abstracts of his communication, it is evident that Dr. Whittaker's extended experience with tuberculin has been in the main similar to my own. The doses he has made use of are larger than those I have employed, but his experience as to the value of the test when intelligently applied, and its freedom from injurious effects, has been the same as mine.

THE PROGNOSIS AND TREATMENT OF ACUTE GENERAL PERITONITIS.¹

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TWENTY years ago, the dread of peritonitis after operations within the abdominal cavity where previous inflammation did not exist, was still the bugbear of surgery. It has gradually occupied a lessening position of seriousness in the calculations of the operator, until to-day the surgeon, who is properly cognizant of the powers of the peritoneum to aid him when respectfully treated, completes his work (no matter what immediate soiling has occurred, be it extravasation of bile, urine, feces, or pus), with slight apprehension that post-operative peritonitis will occur. The once-dreaded invasion of the peritoneal cavity has become a matter of safe conduct when the operator is the invader. Nevertheless, this same cavity has become a battleground of great interest in the surgical field to-day, when not the surgeon, but germ-laden matter, is the invader, and precedes the surgeon by many hours. Here the race becomes unequal. A death-dealing blow has been dealt to the human body in one of its most vital parts, a blow from which it is possible to rally, under some circumstances, by intrinsic powers of resistance, but which, under most conditions, is followed by an encounter, the outcome of

¹ A contribution to the discussion upon "Peritonitis" at the the Fourth Triennial Congress of American Physicians and Surgeons, Washington, D. C., May 4, 5, and 6, 1897.

which will often depend on extrinsic aid from the physician and surgeon.

It is to the study of this most important and narrowing field that our attention is turned.

That the peritoneal cavity is not equally impregnable in all its parts is a well-established fact. Not that the same susceptibility does not exist in all anatomically similar portions of its surface, but from varying contour, or proximity to actively moving viscera, it transpires that the greater part of those invasions which originate in the pelvis, or in the fossæ outside the colon, or in a less measure in the area anterior to the stomach and liver and above the colon, become localized within a few hours, and are under the control of Nature's reparative processes in the confines of quickly built up lymph walls; while a discharge of offending secretions into the more central part among the small intestines becomes a grave menace, from causes the principal of which seems to be the difficulty encountered in throwing up barriers in the presence of quick-moving intestinal coils, which rapidly distribute the infection.

Hence, we will see that the location of the invasion, independent of the quantity and virulence of the material spread about, has much to do with determining the gravity of the case and the need of action. The scholarly treatment of the subject of general peritonitis, in all its minor and major phases, by Treves and other writers, and the graphic delineation by Dr. Senn of the varieties and classification, impress upon our minds the value of thorough understanding of the nature of peritonitis and the methods adopted by Nature to save life. They prepare us to accept the dictum that all peritoneal invasions by infectious processes, of which we shall speak, are essentially fraught with the greatest peril. Although general peritonitis may originate in any portion of the cavity, we must exclude from our thoughts in this discussion all limited forms, no matter how grave their concomitant symptoms. We know that an intra-abdominal abscess or slight infection may be accompanied by so grave symptoms that, to the clinician, it may seem to be a case of general peritonitis, and a surgeon may even wrongly report operation on general peritonitis, because he has opened an enormous abdominal abscess which had crowded the uninflamed intestines into the upper part of the abdomen.

The grave form of acute general peritonitis which we are to consider is one which is caused almost universally by the rupture of some one of the hollow viscera (stomach, intestines, appendix, or bladder), and for the practical surgeon need not be classified on any but a clinical basis. We must accept the universal bacterial origin of peritonitis, and regard

the victim as poisoned by the septicemic infection. Apart from all other considerations we must say that acute general peritonitis shall include only those cases in which the infection is not confined by any lymph barriers. The stage at which it is seen will determine the area of the peritoneum invaded. The affection is the same whether it include half or all of the entire peritoneum—for who can say when the last few inches are affected? The case which we operate on to-day and find universal had spread to only half the abdomen yesterday and six hours earlier to one-quarter of its area. The surgeon has to form an estimate of each particular case at the time of operation by the naked-eye appearances and thus classify it as to gravity. If he has been fortunate enough to inspect it by early operation he will find most various appearances all illustrating an early stage of a disease inevitably advancing to a fatal issue. The one essential feature that allows a case to be classed as acute general peritonitis is that there are no boundary limits. Given a turbid, semi-purulent or purulent effusion about inflamed small intestines arising from perforated stomach or gangrenous appendix, with no effort of Nature to wall it in, and the fatal end of the case is not far off unless arrested by the surgeon. Septic infection has already occurred and Nature has failed to wall it in.

The only subclassification of this form of peritonitis is into the early and late stage. Both are equally grave if left to Nature.

Opinion has been growing skeptical as to the value of operation in this form of peritonitis in any stage. Speaking of general diffused non-tuberculous peritonitis, Treves says: "I am doubtful if a single human life has been saved by surgical interference in a genuine case of peritoneal toxemia." Richardson says: "In a large number of cases of general peritonitis, verified by bacteriologic examination, the result with hardly an exception has been fatal in my hands under any method of treatment." Weir says that he had never been able to save a patient nor had he seen one saved. Von Winivarter, after a large experience, writes: "In not a single case where the exudate had a fecal odor have I succeeded in saving my patients, all have succumbed to the septic intoxication. . . . We possess no means of checking a peritonitis of septic character." Regnier says: "Laparotomy and lavage are unavailing for the cure of a true general peritonitis. The various cases we hear of are cases of large encysted purulent collections." Delorme says: "I have operated on many cases of general peritonitis and I have lost all my patients."

Facing this pessimistic opinion, which is echoed from many sources, it seems evident that the opti-

mism of those who report from thirty to sixty per cent. of cures, is born of a misunderstanding of the variety of the disease discussed. Let us then make no mistake in appreciating the character of the disease.

As I have already stated the only warrant for classifying cases under this head is the presence of reasonably extensive involvement of some part of the small intestine from foul contamination, which is absolutely not limited by any boundary adhesions. As far as septicemia goes, they are all septic, and under the above conditions practically guarantee an ultimately fatal issue under expectant treatment. Demonstration of the presence of noxious bacteria in the exudation has been so constantly shown that it may be admitted to be universal. Acute general peritonitis is an *a priori* argument of their existence.

The variety of the bacterial flora corresponds with that found within the intestines. Elaborate research has already demonstrated the streptococcus and bacillus coli commune as most uniformly present. Therefore, we are prepared to study the prognosis of *unlimited peritonitis* from an operative point of view, regarding it, if fairly widely developed, as being on the high road to a fatal issue.

The effort made by the system of the patient to protect and rid itself of the parasitic assault, is a complicated and beautiful one. The power of the peritoneum to rapidly remove large quantities of fluid, introduced experimentally in animals, as studied by Wegner and others, demonstrates that from three to eight per cent. of the animal's weight of fluid can be taken up in an hour—equivalent to the entire weight in one day. Murcatello demonstrated, also (*Virchow's Archives*, 1895), that the current of absorption is toward the diaphragm, which fact is of practical import. Carmine particles suspended in fluid are quickly carried through the intercellular openings in the peritoneum covering the diaphragm into lymph spaces beneath, where direct communication is had with the mediastinal glands. Here the parasites can be found arrested in five to seven-minutes' time if the animal is held head downward.

Before the visceral peritoneum begins absorption into the lymphatic system of the mesentery that which lines the diaphragm has given exit to bacterial infection and leucocytes, which are speedily taken into the blood current and sent to the large abdominal organs—the liver, spleen, and kidneys.

Experimental research shows that when a small amount of infectious culture of intestinal bacteria is injected (a cloudy emulsion of 5 or 10 c.c.) it can be disposed of without fatal effect. A small quantity produces diarrhea; more, a local peritonitis; still more, a fatal fibropurulent peritonitis—and a larger dose, acute fatal sepsis, without peritonitis. Exam-

ination of the survivors show no streptococci in the peritoneum 5½ hours after injection of small quantities. The experiments of Barron and others, however, show that a very minute quantity of fluid from an inflamed part (such as fluid from puerperal peritonitis) produces much graver symptoms than a larger quantity of a culture from the same germ. The destruction of bacteria by phagocytosis, and the unexplained bactericidal action of blood-serum, are coincident methods called into action in the emergency and need no description here. When the injection is severe they are inadequate and every organ teems with bacteria soon after pronounced septicemic symptoms appear.

With such recognition of the power of the peritoneum to rid itself of small toxic doses, we turn to the demands made upon it by disease and accident. Taking the experience of hospital surgery as representing an average we find that acute general peritonitis results in the majority of cases from infection starting from the appendix. Second to that, perforating gastric ulcers, intestinal traumatism, ruptured pelvic abscesses. Ruptured urinary and gall-bladders occupy a relatively smaller place.

With the nature of the invading medium, it is evident, the virulence of the attack must vary. A discharge of stomach secretion into the peritoneum seems not to be so quickly toxic as a minute quantity of active poison pent up in an already inflamed appendix, yet by its eroding action on the endothelium paves the way for absorption soon after. So also with normal urine or intestinal contents not in a state of inflammatory ferment at the time of invasion. In such cases septicemic symptoms supervene some hours after the accident. Perforating gastric ulcer, if it has time to leak slowly into the peritoneum, will almost surely be controlled by adhesions, and the alert operator may save general invasion by incising the epigastric abscess.

Most perforations, however, occur after a meal, and general peritonitis is set up simultaneously from the stomach to the pelvis. The degree of inflammation found will be in exact ratio to the lapse of time before operation.

Recent statistics show that, up to five years since, no operative case for perforating gastric or duodenal ulcer had recovered. Weir has recently collected 97 operations, with 22 recoveries, and to his statistics I am able to add a summary of twenty reported later, three of these being my own. In these additional 20 general peritoneal extravasation occurred in 18, and of this number 12 recovered and 6 died. Out of the 12 recoveries operation was performed within ten hours in 7 and after twenty-four hours in 5, showing the value of prompt action. Of the six

fatal cases in all but one operation had been delayed until after the first day. In two fatal cases the peritonitis was practically cured, but the patients succumbed to septic pneumonia as late as the seventeenth and twentieth days. Weir says, in reviewing his statistics: "More than half of all the patients operated on in the first twelve hours recovered, the mortality being 39 per cent.; while of those operated upon from twelve to twenty-four hours after perforation, 70 per cent. died, and of those who came to operation after the first day, 87 per cent. succumbed." In conclusion, he says: "The happy result of operation is dependent more upon its early performance than upon any other factor." My own feeling is most hopeful that future contributions to this subject will show that the earlier we can operate on these cases, the more surely will we be able to combat the disastrous accident.

In gunshot or stab or penetrating wounds of the abdomen there is a universal consensus of opinion that operation at the earliest possible moment is the only justifiable attitude. The surgeon can never be absolutely positive some organ is not injured or that there exists concealed extravasation until he has seen the invaded part. If it be a slight stab wound, or if shock is greater than will warrant anesthesia, it is incumbent on the surgeon to make an incision or an extension of the wound under cocaine anesthesia, and if nothing be discovered he may then be justified, and only then, in awaiting symptoms. If he finds perforation or hemorrhage, a temporary arrest of the flow will be conservative until two or three hours have given the patient time to recover from shock. The statistics of gunshot wounds corroborate the value of promptness, as seen in every other phase of abdominal work. Of 39 cases operated on within twelve hours, 18 recovered, while of 22 after twelve hours, only 5 recovered. Likewise in rupture of the urinary bladder, which was uniformly a fatal accident until recently, the mortality has been reduced from 90 to 50 per cent. during fifteen years. Sieur's paper reports 34 cases and 14 recoveries. Schlanger notes 22 operations and 10 recoveries. The evidence is accumulating that early cleansing and draining will insure a prompt recovery, unless cystitis be previously present when the chance of grave peritonitis is enhanced. So also if the gall-bladder be inflamed at the time of injury, the bile is swarming with bacteria, notably the coli commune, which have worked back from the duodenum, and septic peritonitis is imminent unless quick and thorough precaution be taken. Normal bile, however, will be fairly well borne and disposed of by the uninflamed peritoneum.

The phase of acute general peritonitis from perforating typhoid ulcer has seemed to me to differ

but little in its course and treatment from that following ulceration of other parts of the alimentary canal. The patient's lower vitality does not militate so greatly against recovery as one would imagine. The peritoneum is able to throw reparative lymph about a slow perforation, though usually it is overwhelmed by a sudden liquid extravasation. The beneficial results of interference are shown by the case of Van Hook, which, as yet, stands unequalled. He operated at two in the afternoon in a case where rupture occurred at five in the morning (nine hours before). Extravasation had taken place wide of the ulcer. The opening was sutured, the abdominal cavity thoroughly washed out, and the patient rescued from collapse, and saved. Excluding all doubtful cases, Finney finds 11 recoveries after 45 operations, showing a success in 26 per cent.—certainly a very admirable showing in the face of practically certain death. The evidence, as he shows, is clearly in favor of early operation. The most striking recoveries were among those operated upon twelve hours after the accident.

It is well recognized that in this trouble there is a marked signal symptom of the beginning perforation. The patient has "sharp continued abdominal pain coupled with nausea." As in gastric perforation the patient feels as I have had them express it either a "tearing pain" or as if something had given way. Hence, the attending physician has in most cases every reason to suspect the nature of the disaster, and little excuse for masking the symptom by morphin while waiting for peritonitis to set in before seeking surgical aid.

After the foregoing considerations we are now able more intelligently to consider the prognosis in that disastrous condition seemingly more common every day, *viz.*, acute general peritonitis of appendical origin. Granted that ninety per cent. or ninety-five per cent. of mild attacks of appendicitis pass over without grave results, there still falls to the lot of the surgeon that unhappy group of septic cases which are presented to him for cure by the too often delinquent practitioner after from two to five days of hopeless expectancy. Of this type, with non-limited inflammation, all are in various stages of septicemia, and the dullest observer must admit that, be it early or late, the patient is on the highway to more profound infection and inevitable death. The literature of the last two or three years teems with references to individual cases and opinions, showing confusion of classification and reporting oftentimes doubtful cases.

I have chosen therefore to ask you to consider a very few reported consecutive cases representative of this class.

Two years since McBurney chose a group of twenty-

four cases distinctively of this type operated on by himself during the previous five years and gave brief details of each, sufficient to identify it as justly classified. He also regards general peritonitis as including those not only which are seemingly universal but such as involve half or a quarter of the intestinal surface and are spreading without barrier at the time of operation. Of his twenty-four cases he saved fourteen. One reads though that in some cases limiting barriers had been thrown up but had subsequently burst and scattered the pus far in advance among the coils of intestine. McCosh, also, in a paper recently read before the Surgical Society chose, among his hospital cases, eight during the past two years and forty-three during the previous seven, which he had submitted to radical operation. Of the forty-three in the earlier group thirty-seven died (86 per cent). Of the eight during the past two years two died. Of all the fifty-one cases thirty-nine died (or 76 per cent). He has carefully confined his choice to cases of distinctly generalized peritonitis.

In my own practice I have chosen with the same point in view thirty-three cases, all that I have operated on during the past five years from among several hundred laparotomies. I would also add ten well-observed cases ably reported by Lockwood (*L. Clin. Jour.*, April 1, 1896) and nineteen consecutive cases during two years by Koerte (*Berlin. Kl. Woch.*, Aug., 1892). It would be unnecessary to enlarge this list for present discussion, and we may fairly say that this group of 137 cases are representative, and would be duplicated in consecutive work by most operating surgeons. As already remarked it is only fair to the discussion to divide these into two groups, representing an early stage and a late stage as nearly as possible. A picture of the two types would be represented by what may be presumed to be the condition of the same patient operated on at the end of twelve hours or neglected until the third day.

From the milder class are excluded all those where clear serous effusion is found free, and from the second cases those where pus is scattered from an abscess at operation, or just prior to it, even though it be found smearing the intestine beyond confines.

In the first picture, the early stages, a day or two after a sharp onset of symptoms, operation will release turbid or semipurulent fluid, which will flow from between presenting coils of intestine before the appendix is reached, and will uniformly be found in considerable quantity in the lower pelvic pouch. When the operator has dried all presenting parts, he draws the dusky, inflamed intestines toward him, and finds no barriers of lymph adhesion; but as he sponges between the coils and advances into the center of the small intestine area, there is less and

less appearance of inflammation. When the visible evidences are less, he thrusts sterile gauze pads still further into the interintestinal spaces, and later, on withdrawing them, finds them wet with clearer effusion than that already removed. He rests satisfied. The appendix in these cases may be either slightly perforated or gangrenous, free among the intestinal coils, or hanging loosely in the pelvis. It is bathed in foul-looking fluid, more turbid than appears elsewhere, and usually has a slimy, virulent-looking coating of non-adhesive exudation. If not thinned by gangrene of its coats, it is highly inflamed and hard.

If treated expectantly it will represent the second class in from one to three days, and on incision thin pus (usually offensive) will stream out of the operative wound—will be found floating the bowels out of the pelvis, and come equally from the opposite side of the abdomen, or in the median line above the navel. The intestines are thickened or even granular, and reddened lymph patches are loosely and irregularly adherent. It is no wonder that surgeons stand appalled before this class and are skeptical as to their ever being cured.

Taking the class mentioned as the most fair that I can find for study we have the following showing:

McBurney, 24 cases, 16 recoveries; McCosh, 50 cases, 12 recoveries; Abbe, 33 cases, 9 recoveries; Lockwood, 10 cases, 3 recoveries; Koerte, 19 cases, 6 recoveries. Total—137 cases; 46 recoveries. It is possible in many of these to divide them into the two classes previously mentioned.

In my own, of which I have clear records, I can assert that of the 33 cases, 6 were of the milder type but progressing rapidly when operated upon, and 27 were of the grave type. Of the mild type 5 were operated on early, and 1 on the fifth day—all recovered. Of the grave 11 were operated on within two days, 3 recovered, 8 died; 16 were operated on from two to five days after the attack—all died.

Of the reported cases of McBurney and McCosh it is not easy to thus classify many of them, but choosing 28 cases, in which the time of operation is indicated, there were 18 of the grave type, and 10 of the milder. Of 6 grave cases taken within 1½ days, 4 recovered, 2 died; of 8 grave cases taken within 2½ days, 4 recovered, 4 died; of 4 grave cases taken within 2½ days, all died. Of 10 cases of milder type, 3 cases taken within 1½ days, all recovered; two cases within 2½ days, all recovered; 5 cases after 2½ days, 1 died. Of 19 cases of Koerte, 16 operated within 4 days, 6 recoveries; 3 over 4 days, all died.

For a summary then we may say that choosing only those 16 which are certainly of the milder type, judging from personal knowledge or the records,

only 1 died. Of the graver type, 64, where the time is noted, the 17 recoveries were all obtained inside of 2½ days. There is but one logical deduction from this review—and that corresponds with the same, drawn with regard to perforations of the stomach and intestines—namely, that the element of time is the one of greatest importance. The earlier the operation the greater the hope. Only 1 death occurred in 16 slighter forms of advancing general infection, and almost no case of the graver type recovered after 2½ days from the hour of attack, the earlier periods showing most recoveries.

There is one point I have discovered in the review, that, of numerous cases where recovery takes place, albumin or casts are not found in the urine. I ask careful consideration of this by future reporters because it would seem that where the kidneys are choked up by the bacteria of septicemia it is practically useless to operate.

If time permitted, I would gladly give some thought to the evidences which distinguish a true case of beginning dangerous peritonitis from the milder local troubles which often begin with seemingly the same violence.

Are there any entirely characteristic symptoms?

A study of the initial signs in cases which have come to operation and been proved has shown me that uniformity of symptoms is entirely wanting. A persistent diffused tenderness spreading to the opposite side of the abdomen is very grave. A board-like stiffness of both sides of the abdomen is suggestive. Tenderness at a point in the rectum as high as the finger can reach in the median line is a sure index of either an inflamed appendix hanging over the pelvic brim, or an acute peritonitis. A pulse that is rapid and quick, or "snappy," is almost a sure index of septic toxemia, and, if it persists more than twelve hours, calls for interference.

Vomiting will usually occur once with most mild attacks, but, if persistent, indicates mischief. The tongue may be clean and moist and the eye bright in one-third of the cases of grave peritonitis, even after two or three days.

The facies of abdominal inflammation is more often a late symptom.

Thoracic respiration is very often seen when spreading peritonitis prevails.

The temperature is frequently but little elevated during the first day or two, while the pulse may be showing great agitation.

These danger signals may serve to aid diagnosis before profound toxemia sets in; when the surgeon can do nothing.

Regarding treatment, substantial progress has been made in determining the lines of action.

There is but one opinion regarding the cleansing of the abdominal cavity when only the lower segment has as yet been invaded. The moment the surgeon sees septic fluid, he sponges it away before it can be scattered. He mops the presenting bowels with sponges in clamps, dripping wet with hot salt solution (3 iss to a quart), and dries them again before drawing other coils into the field of inspection. As soon as parts are found not much inflamed, he pushes a sterilized gauze tamponade, properly folded, among the bowels far away from the field of work. This has a tape sewed to it, to which a clamp is fixed and left outside the wound. One or two such tamponades may be thrust upward and across the abdomen before the pelvis is cleansed, to which much attention is *always* to be given. This being thoroughly mopped out, a light packing of mild iodoform gauze is to be placed in the pelvis, and a short way among intestinal coils elsewhere, especially if the gauze tamponades now removed prove to have come out wet, absorbing the thin effusion from a distance. The abdominal wound should never be closed in any septic case. It wastes time, confines infection, and prevents drainage.

In the grave cases, a long median incision, or two lateral ones, will always be needed. The lumbar drainage incision will only be necessary when the median cut is used.

The question of drainage has been thoroughly settled in favor of ample gauze packing as against rubber or glass tubes.

The lymph barrier quickly thrown out by the peritoneum wherever the gauze is in contact at once forms a boundary line, beyond which one process is going on, namely, absorption, destruction, and elimination of the marginal infection, already entrapped, while at the site of packing the current is reversed and everything is sucked into the gauze and removed.

When infection has been widespread there is but one alternative—irrigation. By flushing the inter-intestinal spaces systematically with hot salt water, as hot as the operator's hand can bear (which will be over 105°, usually), these effects are produced. The water cleanses and stimulates the patient amazingly. One sees the pulse respond at once and remain steady long after the operation, and the absorbing power of the washed endothelium is diminished. This has been shown by experiments of Kinscherf on animals where doses of strychnin or bichlorid of mercury left after irrigation were not absorbed, while the same put into the peritoneum of dogs not irrigated were fatal. Thus the toxin absorption is temporarily arrested, while the patient fights for time to discharge the burden already taken up.

In the large abdominal incisions in bad cases, it is wise to leave the wound widely open, the gauze will hold back the intestines, and abdominal straps and binder will support the abdominal walls.

If the intestines are distended with gas and fluid feces it is well to let them come out of the abdomen, receive them in hot towels in charge of an assistant, and prick one or two prominent places with a knife to evacuate gas and noxious excreta, which is washed away with a constant hot stream. Through one opening there should then be injected a syringe full of saturated solution of Epsom salts and the puncture closed. I have done this on three occasions during the past three years, but only in the very worst cases.

McCosh, however, advises in all bad cases to pass such a dose of salts through an aspirating needle into the bowel, and close the aperture with one suture, which I heartily endorse as a routine procedure. It cannot be vomited, it excites downward peristalsis, and as it aids to carry off impurities, it proves of the greatest value.

In regurgitation lavage of the stomach should be done before and after operation, and repeated as soon as regurgitation is renewed.

The rectal tube to relieve distention by gas is of inestimable value, and its use not infrequently marks the turning point in the disease by promoting downward peristalsis.

Some of the most brilliant recoveries I have had have been where the attending doctor has been ineffectually plying the patient with calomel or physic, which acted only after operation, or where a good dose of calomel taken after operation has rid the body of all noxious excretions on the second or third day.

The value of an ice coil, or light broad ice bags after a general peritonitis, cannot be overlooked. I have great faith in cold thus used to retard the inflammatory action and bacterial growth either before or after operation. Moreover, it is almost uniformly grateful to the patient.

I will not detail other restorative measures which must be plied on general principles. Strychnia 1-40 gr. every two hours is sometimes necessary, and in cases of severe pain when the patient is well out of ether, morphine, hypodermically, is rather helpful than otherwise.

In conclusion, I would say that close study of the bad cases of general peritonitis shows it to be one of the most absolutely fatal maladies with which we have to deal. It has also been demonstrated that logically and statistically the earlier the operation on the lines delineated the better the prognosis. It has been further shown that even in the bad form if operation be done and a masterly irrigation carried

out there still remains a chance for life if the period elapsing be not more than two and one-half days. In cases where albumen and casts show in the urine it is proof enough that the system is already overwhelmed and the kidneys and other glands are choked and the operation hopeless.

The burden of responsibility then for fatal issues in so many cases lies not with the surgeon so much as with those who withhold from him the opportunity to render the prompt aid which we have shown is the only chance. The ideal success may be accomplished in the future not more by new methods than by new opportunities. The ideal operation may be the old method under ideal circumstances as to time.

**NOTES ON THE ULTIMATE RESULTS OF
THYROID FEEDING IN CRETINISM, WITH
SPECIAL REFERENCE TO THE EARLY
STIGMATA OF DEGENERATION.¹**

By H. H. VINKE, M.D.,
OF ST. CHARLES, MO.

CRETINISM is a condition of complete degeneracy dooming its victim for life to a degree of mental and physical development not much advanced beyond that of infancy. Metabolism appears to have come almost to a standstill in these cases. Careful scientific research has developed the fact that the immediate cause of this rare affection is an absence of thyroid secretion, resulting either from an entire absence of the thyroid body or from total disorganization of that gland. Thyroid feeding in these cases has been followed by a reanimation, so to speak, of the centers controlling normal metabolism, and by renewed physical and mental growth.

Improvement in the physical condition of these patients is first noted; they begin to grow rapidly, the face assumes a more intelligent expression, and there is an apparent return to a normal condition. Intellectual improvement is as constant as improvement in the physical condition, but not so rapid, which is quite natural when it is remembered that the mind of a cretin is not advanced beyond that of an infant. A complete return to a normal condition undoubtedly depends upon the length of time the disease has existed when treatment is undertaken. When early, a complete cure may reasonably be expected; when undertaken late, after the disease has persisted for years, during which period all growth is practically in abeyance, it is practically impossible to regain all that has been lost, although considerable improvement may confidently be looked for. Normal thyroid secretion is most important to the economy during its developmental period, but is in-

¹ Read before the Tri-State Medical Society at its annual meeting, held at St. Louis, Mo., April 6, 7, and 8, 1897.

dispensable at all times, for, after the complete ablation of the thyroid gland in the adult, cachexia strumipriva or surgical myxedema is known to ensue. We may, therefore, safely assume that in cretinism thyroid feeding must be continued throughout life.

Unless we hold that cretinism is an affection of different degrees, complete absence of thyroid secretion entails the gravest forms of the disease, the milder forms resulting when the thyroid gland continues to secrete some thyroid juice which is insufficient in quantity or changed in quality. In the latter case, the administration of healthy thyroid juice might in time excite normal functional activity of the thyroid gland. It is probable, however, that the human organism exhibits the classic symptoms of cretinism only when there is a complete annihilation of the thyroid secretion, and that in cases where there is simply a lack of sufficient secretion, merely a few evidences of degeneracy will be found.

The opinion has been advanced that when in time this earth ceases to be a suitable habitat for the species homo, the last state in the radical degeneracy will be a condition not unlike that of cretinism, but as yet cretinism is comparatively rare. Much more frequently, however, do we meet with marks of defective development or stigmata of physical and mental degeneracy. Prominent among the former are: A bulky head out of proportion to the body, persistence of the anterior fontanel beyond the second year, a meager growth of coarse and dry hair, late eruption of the teeth, goiterous degeneration of the thyroid gland, modification of the voice; dry, coarse, and loose skin, general obesity with characteristic softness of the hypertrophied adipose tissues, a prominent abdomen, rachitic deformities, such as curvatures of the long bones and of the spine, persistent low temperature, etc. Stigmata of mental degeneracy comprise lack of vivacity, torpor, sopor, and the different degrees of deficient intellectuality, of which an enfeebled mind is the mildest and idiocy the severest form. Such marks of degeneracy we would expect to find in children who are backward, whose growth is stunted, and who walk and talk later than normal children. In fact, unduly retarded physical and mental growth, even in the absence of the anomalies and deformities referred to, is suggestive of insufficient thyroidization. Assuming that all these marks of degeneracy depend upon defective metabolism, of which a lack or perversion of the thyroid secretion is a prominent factor, the field of applicability of thyroid feeding would be considerably widened, for, inasmuch as thyroid feeding is followed by such excellent results in cretinism, the conclusion that thyroid feeding would be equally successful in the earliest

manifestations of degeneration might be drawn without undue temerity.

The importance, then, of recognizing the earliest stigmata of degeneration is obvious, for, by judicious treatment with thyroids we might not only expect to prevent ugly deformities, but also complete degeneracy. I wish to call attention here to the fact that we are indebted especially to Schiff, Horsley, and Murray for all we know of the functions of the thyroid. By careful experiments on lower animals these scientists were enabled to determine not only the function of the thyroid body, but also to point out the remedy for disturbed or annihilated function of that organ.

For the past six weeks I have been treating a child with thyroid extract in whom some of these marks of defective metabolism were apparent. Owing to the poor health of the mother, this little girl had to be fed from birth on boiled, sterilized, and condensed milk, different commercial foods, etc., and as a result of this feeding the little one saw few well days during the first two years of her existence. Gastro-intestinal disturbances were constantly present, slight and unimportant at times, and again so severe as to require the attendance of a medical adviser, when new medicines and some new food would be prescribed. It is surprising indeed that a large number of physicians should take so little interest in such an important subject as infant-feeding, and that they should be willing that manufacturers of foods should solve for them such an important problem. At the time that the child was put upon thyroid treatment I found the head out of proportion to the body and much larger than that of her sister, who is two years older. Her hair was coarse and dry and looked not unlike that of a doll. The skin was coarse, loose, and flabby over the entire body, and usually moist, with an offensive sweat. Over the chest and abdomen there was a rash, probably the result of inflamed sweat-glands. Distinct depression over the lower ribs on both sides, immediately under both nipples, was evident. Myxedematous deposits were found on the dorsal surfaces of both feet. Though nearly three years old, she could not support her body on her feet, and her vocabulary was limited to a few words, and these could be understood only by her parents.

It has been determined that the dose of thyroid extract is from $\frac{1}{2}$ a grain to 1 grain a day for children under two years, and from 1 to 3 grains daily beyond that age. As much as 6 grains daily has been given for a short time. One grain of the extract represents 10 grains of the fresh thyroid. This little patient has been taking 1 grain of the extract daily during the past six weeks without any ill effects.

Though there is no marked change in the different measurements of the head and body made at the beginning of the treatment, I am able to notice a distinct improvement in her physical and mental condition. The hair is assuming a natural gloss, the face has a more intelligent expression and is less bloated, she is brighter, and, when supported, she can stand on her feet for some time. The time is yet too short to enable me to arrive at positive conclusions, but I feel confident that thyroid feeding in this case will in time bring about a normal condition of affairs.

THE DELIRIUM OF CONVALESCENCE.

By LAMBERT OTT, M.D.,
OF PHILADELPHIA.

THIS condition, the delirium of convalescence, apparently paradoxical, is a truism and a rarity, and when encountered gives the physician no little annoyance because, being an unusual concomitant of the stage of improvement in disease, suggests the possibility of the development of an impending attack of insanity. The delirium of disease in its inception and height is a natural and expected association, but to have it continue when other symptoms have abated and the patient has emerged from a dangerous condition and is declared safely over his trouble, or to have a delirium set in for the first time when the patient has reached such a stage is often perplexing and at times suggests a suspicion of a concealed dyscrasia foreboding further mischief.

In some cases of delirium accompanying the stage of improvement of disease it is surprising how often one notices a striking resemblance of an attack to delirium tremens, which I believe it often is. One often finds that a patient has been in the habit of taking from three to five drinks of whisky daily for years, and when he is bedfast for a time, the stimulant having been withdrawn, he progresses favorably through the disease with no mental wandering, but as his condition begins to improve and everything points to an undoubted recovery, he unexpectedly talks discursively, has hallucinations, and gradually manifests all the rational symptoms of delirium tremens. The patient is not known as a drinking man, nor does the physician dare to mention the real nature of the attack, but with potent doses of chloral and bromids to induce sleep the mind becomes normal and he is soon about. Such an attack occurring in the decline of a disease, especially where delirium is to be feared by reason of it indicating metastasis or the extension of the disease to vital brain centers, is viewed with misgivings, and for a time surrounds the issue with an element of doubt.

The following is illustrative of the above facts:

K., aged fifty-eight years, had tonsillitis. The second day the condition of his throat was better and the fever subsided, when a redness and swelling appeared on the nose. The next day the redness spread to both cheeks and fever set in, the temperature not going higher than 103° F., and thereafter the symptoms ran the usual course of an ordinary attack of facial erysipelas. On the fifth day the fever subsided, the tongue became moist, and the pulse normal. The patient now presented every appearance of being well, when, on the sixth day, his mind wandered, he became sleepless, delusions multiplied, and on the seventh day his hallucinations were those ordinarily met with in *mania-a-potu*, though subdued in form. He had no headache, there was an entire absence of fever, the pulse was excited and rapid, there was no vomiting, the tongue was moist, and the urine normal. Chloral and bromids, in 10-grain doses, every hour until sleep was induced dissipated these symptoms, and he was soon convalescent. This condition simultaneously appearing with that of an erysipelatous redness on the head naturally caused no little alarm, and the patient's family felt that inflammation of the brain had set in, nor did I feel absolutely certain as to the cause of the phenomena, but in view of the negative signs I contended that there was no inflammation of the brain coverings, as the issue of the case proved. The delirium was not the wandering of meningitis but more like that met with in alcoholism.

In the apical pneumonia of children, aptly called cerebral pneumonia, there is usually an accompanying delirium of a low, persistent type, at no time violent or excitable, continuous throughout the course of the attack, and not dependant upon the severity of the disease, nor requiring a decidedly elevated temperature to produce it. The association of this form of pneumonia and passive delirium is nearly constant, and even after convalescence is established I have seen the mental wandering continue, always being attended by a rapid pulse and anemia. After a course of tonic treatment the patients have usually recovered.

I have seen delirium in the convalescent period of typhoid fever even in patients manifesting no mind disturbance during the height of the malady. In such patients we find a profound anemic state, and very likely if no vicious family predisposition is present, the faulty brain nutrition is contributive to the condition, the mind becoming normal, as the system regains a healthier tone. Typhoid fever is most productive of the delirium of convalescence, then comes pneumonia, and next severe attacks of scarlet fever. In scarlet fever of an anginose variety, when the convalescence is retarded by complications and sequelæ, such as rheumatism of the joints, serous-membrane inflammations and tubal nephritis, prolonging the disease and consequently impoverishing

the blood and lowering the vitality, a low mental wandering is manifested even after all unfavorable systems are removed, and one notices a gradual subsidence of the hallucinations as the systemic condition improves. I have seen the same condition in severe cases of measles, when great prostration, glandular swelling, and anemia accompanied the improvement following the immediate attack. One is constrained to suspect some hidden complication, such as catarrhal pneumonia, in these cases, but in several instances in which delirium, or, I might say, a mental wandering, existed, I was unable to find any lung complication whatever. The patients all improved slowly under predigested nourishment, stimulants, absolute rest, and strychnin. The family history in this class of cases is negative, but a low order of mind usually exists, and it is therefore likely that a feeble-minded child in health is less able to withstand the perverse brain nutrition induced by severe and prolonged attacks of the continued and eruptive fevers, or by lung inflammation.

The delirium of convalescence is a transient delirium with lucid intervals, and has the peculiarity of not being persistent, nor is the patient beyond persuasion of the error of his delusion. His attention can be gained and retained with an effort, and the mind with some aid and guidance operates in normal channels, but left to itself the wandering is resumed.

There are several conditions present in these cases, such as a rapid and feeble pulse, anemia, great prostration, subnormal temperature, and a weakened peripheral circulation, as shown by the cold and pallid extremities. The slightest exertion, as assuming the erect posture, or drinking hastily, induces dyspnea. Occasionally vomiting is an attendant symptom, and this added to the previously described condition, is suggestive of tuberculous meningitis, but an absolute absence of headache enables one to exclude this possibility. It is not always easy to arrive at a definite conclusion but as the case progresses a diagnosis is readily made. One noteworthy fact is the great alarm of the family when it is patent to their minds that the ill one has safely passed through the attack of disease.

As to treatment, strychnin, three times daily, and, in children, a palatable red wine pushed to toleration, produces the most happy effect. Iron is indicated, but if the stomach does not receive it kindly then I depend upon rest, stimulants, and nourishment, watching the secretions, and for the development of complications which are always insidious in their approach in these states of lowered vitality.

ACUTE SOFTENING OF THE PONS, RESEMBLING OPIUM POISONING.¹

By THEODORE DILLER, M.D.,
OF PITTSBURG.

SYMPTOMS resembling opium poisoning may result from softening of, or hemorrhage into, the pons. In a brief but very instructive paper published recently, Dana² has analyzed a large number of cases of hemorrhage into the pons, and called attention to the fact that acute lesions of this organ have, a number of times, been mistaken for opium poisoning, and he is able to cite several instances of this sort.

The symptoms which are alike in these two conditions are: coma or stupor, greatly contracted pupils, and a slow rate of respiration. Given the case of a patient exhibiting these symptoms and without a history, a diagnosis would be difficult or impossible; and of the two acute lesions of the pons, it would seem that the difficulty of differentiating from opium poisoning would be greater in the case of softening than in that of hemorrhage, for in the latter instance the sudden onset would very likely greatly aid in clearing up the diagnosis in any case with medico-legal bearings. Of these two lesions, softening is of much more frequent occurrence than hemorrhage, and it is rather surprising that the resemblance of its symptoms to those of opium poisoning has received such scant notice in text-books and current literature, the chief attention being directed to the rarer condition, hemorrhage. It is well known that acute lesions of the pons, produce different symptoms, depending upon the size and location of the lesions, and I do not wish to be understood as maintaining that the symptoms resulting from acute softening always produce symptoms resembling those of opium poisoning, but only that they may do so—how frequent it would be difficult to state. Aside from these medico-legal considerations, the case I wish to report is, I believe, of considerable interest purely from a clinical point of view. Its chief features, briefly, are as follows:

Mrs. B., aged sixty-six years, on the evening of March 7, 1896, was seized with severe cramps accompanied by vomiting. Dr. Thos. Kirk, who was called to see her, prescribed one-eighth of a grain each of morphin and calomel, to be taken every two hours. The patient continued this treatment for about twenty-four hours, taking during this time about one grain of morphin, when it was discontinued. On the evening of March 9th her husband was killed by a street car. She was at once informed of this fact, but she soon forgot it, and was retold of it several times during the evening, only to forget it again. Dr. Kirk then noted for the first time that

¹ Read at the Twenty-third Annual Meeting of the American Neurological Association, Washington, D. C., May 4, 1897.

² *The Post-Graduate*, vol. xi, No. 7.

her pupils were contracted. The next day she was somewhat stupid or lethargic. This condition grew upon her during the next twenty-four hours, at the end of which time she was in almost complete coma.

When I saw her on March 12th, with Dr. Kirk, she had been comatose for forty-eight hours, with slow, irregular respirations, greatly contracted pupils, and twitching of the muscles of the face. The coma, however, was not complete, for a painful stimulus caused withdrawal of either arm or leg, and an expression of pain on the face. The pupils were so contracted that they would ordinarily be described as "pin-point pupils," but more accurately, I think, as "pin-head pupils." A convergent squint was present. There was a good deal of twitching of the muscles about the mouth. The respirations were about seven or eight to the minute, and came in pairs of threes, with long intervals between each group. Her temperature, which on the 7th was 103° F., had come down until the 10th, when it was 100° F. It then slowly rose and was 101.5° F. on the 12th. She continued in the condition described until her death which occurred the next day. It was a source of much regret to both Dr. Kirk and myself that an autopsy was refused.

The morphin given during the attack of gastro-enteritis, which was the beginning of the patient's illness, was most carefully administered, and there can be no doubt that the amount taken was as above stated, and that none was given after the first twenty-four hours. Mental confusion was noted about the time the morphin was discontinued. Stupor began twelve hours later and gradually grew deeper, but twenty-four hours elapsed before this stupor developed into actual coma, and the coma was never complete. These facts alone, had the case been a medico-legal one, would have sufficed to show that the symptoms were not due to morphin poisoning.

The points laid down by Dana which distinguish an apoplexy of the pons where there are contracted pupils, slow respirations, and coma from opium poisoning, were well illustrated in this case. According to this authority opium poisoning is characterized by a rise of temperature of from .5° to 1°, there is no twitching of the muscles, the respirations are slow but regular, and coma is complete, while in apoplexy of the pons there is a rise of temperature of from 3° to 4°, twitching of the face muscles is present, the respiration is irregular or Cheyne-Stokes in character, and coma is incomplete.

In the case reported, another symptom of considerable importance was present, *vis.*, an internal squint; and this, taken in connection with the other symptoms, strengthens the correctness of the diagnosis arrived at—acute lesion of the pons. The gradual onset of the cerebral symptoms of course indicated softening rather than hemorrhage. The early rise of temperature, due to gastro-enteritis, the

subsequent fall, with abatement of the gastro-intestinal symptoms, followed by a rise during the first two days of coma, are interesting features. What to me seems a reasonable explanation of these facts is the following: A condition of the cerebral vessels favorable to the formation therein of a thrombus was present, and the fall of temperature was due to a subsidence of inflammation; but during this time a thrombus formed in the pons, favored by the altered condition of the blood, softening followed, and with it coma, and a second rise of temperature.

A CASE OF LEAD POISONING PRESENTING SOME UNUSUAL EYE SYMPTOMS.

By CASEY A. WOOD, M.D.,

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ALTHOUGH ocular symptoms, as a result of plumbic intoxication, have been recognized and studied for over two centuries attention has been chiefly directed to the visual defects arising from the fundus changes, especially inflammation or atrophy of the optic nerve. In recent years a transient amblyopia, not attended by any lesion visible to the eye and comparable to the temporary blindness of uremia or diabetes, has also been recognized and frequently reported. Various forms of retinitis, too, have been observed, and these are believed by Parisotti¹ to be due to a form of endovasculitis which he terms *endarteritis saturnina obliterans*.

Another class, possibly rarer than the foregoing, includes instances where the intoxication produces paralysis of one or more of the extrinsic ocular muscles. The following report is of such a case:

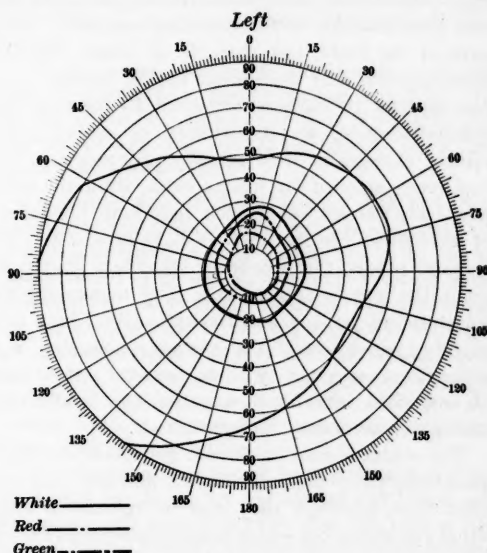
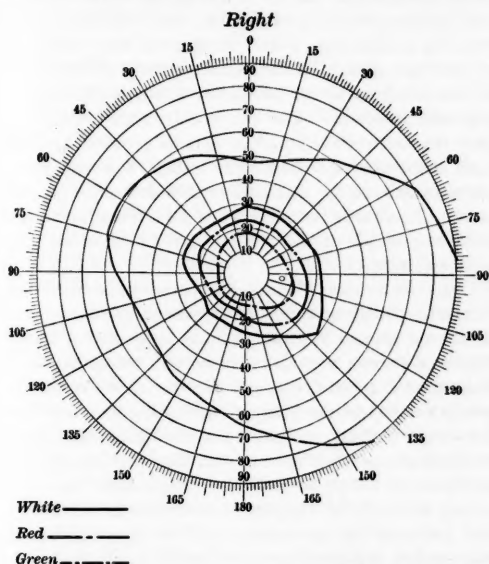
Jacob B., aged forty-nine, has steadily followed the occupation of painter for sixteen years, doing both inside and outside work during that time. He has enjoyed fair health and the only history of illness, apart from the attacks about to be described, is that of typhoid fever many years ago, followed by a large carbuncle in the lumbar region. He is married and has had five children, of whom one died at six months of age. There is not now any evidence of syphilis in his own person or that of his wife or children. He has had no injury to the head nor is he the subject of any lesion of the brain or cord. He has, however, had several attacks of what seemed to be true painter's colic. The first of these come on five years ago, and the last one six weeks ago. There has never been any weakness of the extensors of the hands, approaching the condition of "wrist drop," but he speaks of having noticed a slight tremor of the hands and a weakness of grasp. There is no definite history of transient attacks of defective vision. Three years ago, on rising one morning, he became dizzy and fell. He says he remained unconscious for half an hour, after which he felt a dull pain which extended over the whole head, lasted two

days, and then gradually disappeared. Since then he has had persistent double vision, and occasional attacks of vertigo. Three weeks after this last attack his left eye began to turn out, and the left lid has drooped so that the eye is almost closed.

His present condition is as follows: his left eye has vision $\frac{3}{8}$, not improved by glasses. With + 3 D. he reads words of Jæger 1. There is complete *ophthalmoplegia externa*, with the exception of the external rectus and possibly of the superior oblique. The paresis of the levator labii superioris is most marked when he is not fixing his eyes. The pupillary reflexes of both eyes are sluggish to light and accommodation. With the ophthalmoscope very few fundus changes are visible, but the outlines of the papilla are not clean cut, and it has a woolly appearance. There are a few patches of disturbed choroidal pigment scattered over the fundus.

fitting hernial truss. The patient's urine and saliva are practically normal. In testing for lead the dihydric sulphid, potassic iodid, and potassic chromate reagents are employed.

To me the most interesting signs of plumbic intoxication in this case are the unilateral pareses, and the fact that the optic-nerve atrophy set in without any of the transient attacks of amblyopia which usually precede the permanent disease. The treatment has consisted of hot baths, small daily doses of magnesian sulphate and potassic iodid; of the latter one gram three times a day, gradually increasing it until nine grams *per diem* were administered. The patient has not been working for the past six weeks. Some improvement in the muscular signs has already resulted.



Contraction of visual field as a result of chronic lead poisoning.

There is nothing abnormal about the right eye except the lazy pupillary reactions and slight fundus changes resembling those of the left eye. $V = \frac{3}{8}$, and Jæger 1 is easily read with + 3 D.

The visual field of each eye is decidedly contracted, the limitations being more marked in the left eye. (See Figs. 1 and 2.) The patient now presents none of the classic signs of plumbism, wrist drop, muscular tremors, blue lines along the gums, etc, but, on the other hand, he has not worked at his trade for some time past.

Dr. Sanger Brown reports that, with the exception of the oculomotor paresis and the optic-nerve defects, there is nothing abnormal about the patient's nervous apparatus. There is absence of patellar-tendon reflex on the left side, but this, Dr. Brown thinks, may be due to his wearing a powerful and ill-

The above is the only instance of saturnism affecting the third nerve that I have observed among nearly 13,000 cases of ocular disease that have come under my immediate care, but I think it is quite possible that I have attributed to syphilis and other causes, examples of ocular paralysis that were really due to lead poisoning. When one thinks of the numerous sources of lead intoxication to which the public is exposed (from food and drink stored in leaden vessels) and of the many crafts in which lead is continually used, examples of oculomuscular defects due to plumbism must be far from rare. However that may be, the reported cases are not numerous. Galezowski¹ reports several of these and thinks they constitute a large percentage of saturnine ocular intoxications, and that they are particularly unsatis-

factory to treat if all the branches of the third nerve are implicated. Incomplete pareses, on the other hand, are more amenable to remedial measures. Landesberg² reports a case of bilateral paresis of the external rectus, while another patient observed by him had complete paralysis of all branches of the oculomotor nerve. Von Schröder⁴ also reports a case of typical neuroretinitis with bilateral abducens paralysis. Wadsworth⁵ gives a very instructive account of a boy, aged 9, in whose urine lead was found for many months, although the source of the poison was never ascertained. He had marked optic neuritis and paralysis of several ocular muscles, and eventually became blind from optic atrophy.

It is not difficult to understand why the eye muscles should occasionally suffer in chronic lead poisoning. One of the most characteristic signs of the disease is an affection of the voluntary muscles in other parts of the body, and there is no reason why the motor apparatus of the eyeball should escape. The case reported by Parisotti furnished, by means of the ophthalmoscope, an opportunity of studying the minute changes as they actually progressed in the capillary system of the fundus oculi, while the comparatively frequent occurrence, in chronic plumbism, of retrobulbar neuritis leads us to believe, with Oeller⁶ and others, that whenever secondary alterations set in the process begins as a fatty metamorphosis (obliterating peri- or endarteritis). As I have previously pointed out,⁷ the nervous, muscular, and other tissues supplied by these nutrient vessels may be converted into fat, fibrous tissue or hyalin substance as a secondary metamorphosis.

The ocular lesions in chronic plumbism are, then, essentially peripheral in character, and are quite distinct from, although they may be coincident with, other eye alterations which sometimes occur as a result of renal and cerebral complications arising in the course of a long-standing intoxication.

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A Valuable Bequest.—By the death of the Duc d'Aumale, May 7th, the Institute of France comes into possession of the Chateau of Chantilly with its great collections, a bequest valued at \$8,000,000.

CLINICAL MEMORANDUM.

EXSTROPHY OF THE BLADDER WITH OTHER CONGENITAL DEFECTS; MAYDL'S OPERATION.¹

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DURING March, 1897, there was sent to me by Dr. Williams of East Otto, N. Y., a boy four years of age, presenting a case of exstrophy of the bladder, with other congenital deviations, which seemed to make it worthy of a special report. The boy was well-nourished and of strong frame in all respects save those below noted. There was a deformity in the pubic arch of just two inches, the bone being replaced by fibrous tissue. The presenting area of the bladder was about the size of a silver dollar, both ureters presenting as papillæ, from which, even on coughing or sneezing, a little jet of urine was projected. At the upper margin of the mucous membrane was seen all that presented of the umbilicus, which appeared as a semilunar cicatrix. The penis was rudimentary and there was complete epispadias, a deep groove taking the place of the urethra. The right testicle was completely undescended and the left had remained in the inguinal canal. There was incontinence of fluid feces, and a tendency to prolapse of the rectum, due to an exceedingly weak sphincter.

I saw no prospect, under the circumstances, for any successful plastic operation, and consequently determined to turn the ureters into the colon, as suggested by Maydl. This was done in my clinic, chloroform being the anesthetic used. I first dissected away the rosette of mucous membrane around the ureters, leaving a small oval portion of the bladder wall and mucous membrane, which included the ureteral orifices. All this was done by careful dissection before opening the peritoneum; then protecting the parts by temporary compression of the ureters, I opened the peritoneum and at once came upon what at first appeared to be the stomach, so thick were its walls and so deceptive the appearance of its vessels. Further investigation showed this to be an enormously dilated colon, which lay almost in the middle line, and which extended straight up toward the sternum. Following it downward, it narrowed to a very small compass, where it became continuous in the pelvis with what, by bimanual examination, proved to be the rectum. It was then seen that a marked congenital defect of the large bowel existed along with that of the bladder. Nevertheless, there was now nothing left to do but to proceed. Accordingly this dilated colon was opened at a suitable point and compression removed from the ureters, after which they were implanted in the colon and anchored, and the wound about them made tight by fine silk sutures. It was then impossible to cover the comparatively small abdominal wound by lateral approximation, so I closed it at a right angle to the ordinary line by silk-worm-gut

¹ Read by title before the American Association of Genito-Urinary Surgeons, Washington, D. C., May 5, 1897.

and kangaroo-tendon sutures, leaving still a raw surface over which the skin could not easily be drawn. Then, in order to close this, I extirpated the spongy tissue of the rudimentary penis and utilized the integument of its lower surface as a flap over the defect above, which it completely and neatly closed.

During the first twenty-four hours the boy did well, passed urine freely from the rectum, and complained but little. During the second night his stomach became disturbed, and on the following morning rejected everything. When I then tried to feed him by the rectum, it was found impossible to make the rectal pouch retain anything, because of the weakness of the sphincter, while to expose the opening between the rectum and the colon above, in order to pass the enemata higher, would have been impossible without chloroforming him and using a speculum. The result was that the boy died about fifty-five hours after the operation, during the last eight or ten of which apparently no urine was secreted, certainly not passed.

A hurried autopsy was permitted, which revealed the absence of any evidence of peritonitis, and showed the bowel condition to be about as outlined during the operation. The rectal pouch communicated by an opening, which would ordinarily admit a lead-pencil, with a large, thick-walled, and much distended colon, that extended toward the liver and had no splenic flexure.

The case illustrates beautifully the embryonic condition by which the lower opening of the alimentary canal is produced, as is the upper, *i.e.*, by an infolding of the surface and a communication with the primary tube, which is later established. In this case the opening was established, but proved utterly inadequate in size for the desired purpose; hence, I take it, the coincident deficiency of the sphincter. Whether the condition of the colon was also a return to simpler conditions and was an evidence of atavism, or whether it had been straightened out as the result of pressure, I could not make out, the autopsy having to be made under most unsatisfactory conditions.

So far as the principal procedure is concerned, I am inclined to think it worthy of performance in any case where the condition of the genito-urinary organs is as rudimentary and defective as in this. The operation of itself means, in effect, a restoration of the urinary canal to the avian type, and makes of the colon and rectum what they really are in birds, namely a cloaca. Should such complications as were met with in this instance be found, the case would necessarily assume from the outset an almost positively fatal aspect. To have turned the ureters into such a rectum as this patient had would have been impossible, while to have determined exactly the bowel condition would have been out of the question previous to a combined examination with the aid of an anesthetic.

A Conference on Balneology and Climatology.—The Russian National Health Society proposes to celebrate, next year, the one hundredth anniversary of the discovery of the mineral springs of the Caucasus by a conference on balneology and climatology.

MEDICAL PROGRESS.

A New Source of Conjunctivitis.—DESPAGUET (*Bull. Médic.*, No. 89) has called the attention of the Paris Society of Ophthalmology to a special and as yet undescribed form of conjunctivitis due to infection from animals, or rather from the remnants of slaughtered cattle. He has noticed it among butchers and those people dwelling in the vicinity of slaughter-houses. The inflammation is usually limited to one eye, and consists in a kind of glandular swelling of the conjunctiva, together with considerable number of granulations of the eyelids and eyeball, which, on pressure, exude yellowish pus. The cornea is unaffected and there is no pain, but the eyelids are swollen. As a concomitant symptom, there is more or less swelling of the parotid and of the cervical glands which sometimes even suppurate. The treatment employed was that of iodoform salve and hot compresses locally, and sulphate of quinin internally. After fourteen days considerable improvement was noticed.

ABADIE also has had considerable experience with this form of conjunctivitis, among butchers especially. He has had several cases under observation in which the disease affected both eyes, and has also observed that it often occurs in an epidemic form.

A Diagnostic Sign of Fecal Tumors.—GERSUNY calls attention in the *Wiener Klin. Wochenschr.*, Oct. 10, 1896, to a symptom of fecal tumors, that is to say, of tumors formed by the accumulation of fecal matter in the large intestine. The symptom is due to a peculiar sensation which one receives by pressing deeply with the finger tips against the tumor and then withdrawing the fingers very slightly. The intestinal mucous membrane is pressed by the finger tips against the fecal matter, and when the pressure ceases, it resumes its former position, giving to the fingers a characteristic sensation.

The sensation is described as being similar to that experienced if the finger tips are covered with grease and first applied and then withdrawn from the palm of the opposite hand. Several conditions are necessary in order to produce this phenomenon in connection with fecal tumors. The mucous membrane must be sufficiently dry; the fecal mass must permit the fingers to press into its substance a little; and there must be sufficient gas to cause the intestinal wall to resume its original position when the pressure is relieved. Finally, when all these conditions are present, palpation must be made with great delicacy. Gersuny has verified this symptom in three cases of fecal impaction.

Is Albuminuria a Contraindication for Nursing?—As the children of women who suffer during pregnancy from albuminuria are usually poorly developed, and are often delivered before time, they, more than others, are in need of their natural nourishment—mother's milk—so that the question is a practical one, whether or not they are to be nursed by a woman who suffers from albuminuria to such an extent that she has to be placed on a milk diet. Most physicians forbid this, but GAMULIN (*Centralbl. f. Gynäk.*, No. 46, 1896), who has collected 138 cases under

PINARD'S direction, reaches an opposite conclusion. He finds that the children of women with albuminuria who are brought up on the breast are as well developed and increase as rapidly in weight as others, and to all appearances are in nowise affected by the nephritis or the general condition of the mother. An exception is to be made in those cases in which, in spite of milk diet, the mother's albuminuria does not improve.

Suture of the Lateral Sinus.—The suture of large veins, when wounded, is a surgical procedure which very recently has come into practice, and, like the ligature and clamp to control hemorrhage, was suggested by the exigencies of operations, attempts being made by surgeons to preserve the patency of large veins in order to obviate the disadvantages, perhaps death, which would follow their closure. Successful experiments upon animals have been reported from time to time during the last eight years, and many surgeons have obtained good results by suturing the axillary, femoral, internal jugulars, and other large venous trunks. One of the most interesting of these successes was the suture of the inferior vena cava by SCHEDE, after its injury, in an operation upon the kidney. At autopsy, some time later, it was seen that the stitches had held perfectly, and that the lumen of the vessel was well preserved. But so far as known, SCHWARTZ records (*Gaz. Heb. de Méd. et de Chir.*, Oct. 22, 1896) the first successful attempt at suture of the lateral sinus. His patient was a man, aged twenty-six, who presented himself with necrosis and a sinus behind the left ear, following a kick from a horse received three months before. At the operation (November 24, 1895) a piece of bone, the size of a silver dollar, was found depressed. It was adherent in part to the dura mater, and, despite every care, the lateral sinus was opened during its removal, a rent nearly half an inch in length being made. Hemorrhage was profuse, but when two fine silk stitches placed in the wounded vein were drawn tight the bleeding was controlled. The wound was lightly tamponed with iodoform gauze, and the patient made a good recovery. The central portion of the depressed area of bone was necrotic, and it was at this point that the adhesion to the sinus existed.

Suppurative Pericarditis Treated by Incision and Drainage.—BOHM (*Dutsch. Med. Wochenschr.*, Nov. 26, 1896) gives the history of a patient in whom a suppurative pericarditis developed as a sequel to influenza and pleuropneumonia. Internal medication was of no avail and death seemed imminent. One month after the beginning of the disease the pericardial sac was opened in the third intercostal space a finger's breadth from the sternal margin. More than a liter of pus and fibrinous masses was evacuated. The contents of the sac had evidently been under considerable pressure. An attempt to insert a drainage tube was abortive. The tube constantly pushed out again. The cavity was therefore drained with iodoform gauze. On account of the wretched condition of the patient the operation was performed under cocaine.

The patient rapidly improved. For one week the pericardial sac was washed out with a solution of boracic

acid. The opening in the pericardium closed in three weeks. Recovery was retarded by two exacerbations of the inflammatory process of the left lung. Three months after the pericardiotomy the condition of heart and lungs was once more nearly normal. One month later the patient resumed his ordinary work.

This is the fifteenth case of pericardiotomy on record. Eight of these recovered. Of the seven deaths, one in a very weak patient was apparently caused by the mechanical shock of the irrigating fluid upon the already weakened heart. One patient died thirty hours after operation, and the autopsy showed extensive fatty degeneration of the heart muscle. In one of the remaining five deaths there were abscesses in the myocardium which communicated with the pericardial cavity. In the others, death resulted from serious complications, extensive pneumonia, empyema, nephritis, etc.

It is worth noting, therefore, that of those cases in which the pericarditis was primary or only complicated by a left pleurisy, only one died; while of those in which the pericarditis developed only as a symptomatic affection in connection with pyemia and septicemia, only one recovered. From this it is perfectly plain that the operation of pericardiotomy is a relatively simple one, and ought to occupy the first place as a therapeutic measure in suppurative pericarditis. Why, then, should any surgeon hesitate to acknowledge in connection with inflammations of the pericardium the truth of the old principle *ubi pus ibi evacua* since the old prejudices against the operation have proved themselves to be merely prejudices?

THERAPEUTIC NOTES.

For Acute Gastric Catarrh.—

℞ Bismuthi subnit.	. . .	gr. x
Potassi bromidi	. . .	gr. xv-xx
Ac. hydrocyanici dil.	. . .	m. v
Spt. chloroformi	. . .	m. x
Mucilag. acaciæ.	. . .	f. 3 ii
Aquæ	. . .	q. s. ad ʒ i.

M. Sig. To be taken every three or four hours about ten minutes before food.—*Brunton.*

For Intermittent Malarial Fever.—

℞ Quinæ sulph.	. . .	gr. xxiv-xlviii
Ac. hydrochlor. dil.	. . .	ʒ vi-ʒ i
Ext. taraxaci fl.	. . .	ʒ iii
Elix. calisayæ	. . .	q. s. ad ʒ vi.

M. Sig. A dessertspoonful after meals in a wineglass of water.—*Dock.*

For the Migrain Accompanying Anemia.—

℞ Ext. cannabis indic.	. . .	gr. ʒ
Ac. arseniosi	. . .	gr. ʒ i
Ferri pulv.	. . .	gr. i.
Ft. Pil. No. 1.		

M. Sig. One pill three times a day, increasing if necessary to two, or even three, pills a day.

Or

℞ Ext. cannabis indic.	. . .	gr. ʒ
Pulv. digitalis	. . .	gr. ss
Ferri lactalis	. . .	gr. ii.
Ft. Pil. No. 1.		

M. Sig. One pill three times a day after meals.

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OF MEDICAL SCIENCE.

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SATURDAY, MAY 29, 1897.

THE AMERICAN MEDICAL ASSOCIATION.

THE jubilee meeting of the Association at Philadelphia next week promises to be an unusually enjoyable and interesting occasion. The officers of the sections seem to have vied with each other in their efforts to secure vigorous discussions of the most vital questions of the hour pertaining to each department. No more convincing assurance is needed that the Association is fulfilling the lofty aims of its founders than is revealed in the program of the scientific part of this semicentennial meeting.

The anniversary exercises will afford a unique feature. The narration of the early history of the organization, the circumstances surrounding the inception of the original idea, the objects to be attained, the early struggles to place it on an enduring basis, the enlisting of congenial spirits whose efforts should carry it forward to completion, and, finally, the contemplation of the result, after fifty years of existence, cannot fail to supply themes replete with interest and pregnant with inspiration for future achievement.

The hospitable doors of Philadelphia have been thrown wide open to receive her guests, and the social functions of the occasion are not the least inviting feature of the program.

Much of the success of these meetings depends upon the ability and energy with which the Committee of Arrangements performs its work. Under the leadership of its chairman, Dr. Hare, the committee has been successful in locating the various section-meetings in comfortable and appropriate quarters convenient to the main assembly hall and within easy reach of each other. By this careful forethought much time will be saved to the members, and the several sections will be enabled to begin and close their sessions promptly, thus avoiding any interference with the general sessions.

In the MEDICAL NEWS of May 22d may be found a convenient map of the city, giving the location of the various places of meeting, the principal hotels, points of interest in the city, etc.

A promising sign of the prosperity of the Association is to be found in the fact that various cities are vying with each other to secure the honor of entertaining it at its annual meeting. Denver, Colorado, is already in the field with a most cordial and tempting invitation for next year.

THE DISPENSARY ABUSE.

IN another column of this issue of the NEWS will be found the report of the Special Committee of the Medical Society of the County of New York on the Abuse of Medical Charity. There is much in this report, as there was in the discussion preceding its acceptance, that will bring home to the profession a keen realization of the unpardonable abuse of medical charity by those who are unworthy of its benefits and a knowledge of the attitude of the governing boards of hospitals and dispensaries toward efforts at reform. The issue is now clearly defined, the reforms necessary to correct the abuses are apparent, and the means of putting them in motion are plainly set forth.

The members of the committee are to be congratulated on the broad grasp of the subject which their work reveals, and the logical steps by which they pursued it to the final drafting of a bill which met the unanimous approbation of both houses of the Legislature. That it failed to secure the approval of the Governor is no reflection upon the merits of the bill *per se*, although the careful study and consideration which it will doubtless receive before its reintroduction to the Legislature may suggest valuable improvements.

The enthusiastic endorsement of the work of the committee by the County Society cannot but strengthen the efforts that will be made in the future to obtain favorable legislation along the lines so much desired.

This action is not local, nor is it confined to the State of New York alone. The County Medical Society has set its seal of approval upon the first well-organized attempt in this country to deal adequately and forcibly with this great question of medical economics. During thirty years of medical development and progress this abuse has been growing, and each effort to lessen it has apparently served only to instil into it fresh vigor and virulence. The responsibility of assuming the burden of the fight is great, and throughout this broad land the eyes of the entire profession will be directed toward this society, with every confidence that its efforts will ultimately be crowned with success.

The amount of work performed by the committee was something prodigious, and, as suggested by the presiding officer, DR. LONDON CARTER GRAY, the details would make very interesting reading, if it were a matter of policy at this time to make them public. The signing of the bill giving control of dispensaries to the State Board of Charities, an impartial tribunal that could be depended upon to justly and equitably use its powers, was secretly opposed by an influence that in the end was successful. But now that the guns of the enemy have been unmasked, the Committee on the Abuse of Medical Charity of the Medical Society of the County of New York will be well prepared to begin the battle anew, and the best wishes of the profession throughout the country will be with it. Legislation is the only remedy, and this is sure to be achieved sooner or later, in spite of all opposition.

SILVER WIRE AS A SUTURE IN SURGERY.

NEARLY half a century has elapsed since J. Marion Sims conceived the idea of using silver wire as a suture in the treatment of vesicovaginal fistula. No sooner was the idea grasped than his fertile mind began devising ways and means for putting it into application, and a willing patient promptly submitted to its experimental use. After twenty-nine failures with various suture material, the thirtieth operation, performed upon this woman, proved permanently successful.

Not only was this the first case in which a cure was achieved by this distinguished surgeon, but it was the first successful operation for the relief of a vesicovaginal fistula ever performed in the history of surgery. No wonder, then, that Dr. Sims attributed the brilliant result to the one new factor, silver wire, and no wonder, also, when similar results crowned his efforts in succeeding operations done with the same suture material, he stood ready to announce the edict that the use of silver as a suture was the great surgical achievement of the nineteenth century.

Undoubtedly the use of silver wire in those early cases, with only the crude appliances which he himself devised, and before anything was known of sepsis and asepsis in surgical work, was the factor which gave him success. Why it succeeded in the very cases in which silk suture had failed, was only explicable to him on the ground that silk acted as a seton, while silver did not. The immediate followers of Dr. Sims accepted his edict that silver wire was the only suture that could be used successfully in vesicovaginal fistula, and used it without further inquiry into the *rationale* of its action.

As the operation became better understood, and specula and other instruments better adapted to their purpose came into use, operators in various fields were able to secure satisfactory results with suture material other than silver wire; so the sentiment gradually grew that Dr. Sims' success was due rather to the fact that he had better facilities for doing his operation, and had attained greater skill, than to the nature of the suture material.

Within the past year, however, a satisfactory explanation of the success attending the use of silver wire as a suture has come most unexpectedly from a foreign source. Dr. B. Credé, attending surgeon to the Carola Hospital of Dresden, in an address delivered before the National Surgical Society of Germany, at its twenty-fifth annual convention, held at Berlin on May 28, 1896, discussed silver and its salts, the citrate and lactate, which he termed the *itrol* and *actol*, and pronounced them the most powerful of all the surgical antiseptics yet discovered. It appears that his interest in silver as an antiseptic grew out of the observations of his father, the elder Credé, on the value of the nitrate of silver in the treatment of inflammatory affections of the eyelids of infants.

Nitrate of silver was not a success as a surgical dressing, however, on account of its chemical instability and its corrosive action on mucous membranes. While visiting the Johns Hopkins Hospital, in Baltimore, Dr. Credé was impressed with the use of silver foil as employed by Dr. Halsted, in affording an antiseptic covering for small or closed wounds. His next experiment, therefore, was made with metallic silver, using it as an antiseptic dressing for wounds. When applied to a sterile wound, he found that it remained unchanged, was non-irritating, and formed a thoroughly aseptic dressing. On the other hand, when applied to an infected wound, the products of bacterial life oxidized the surface of the silver, and, entering into combination with the argentic oxid, formed argentic albuminates, which had powerful antiseptic properties. Careful analysis developed the fact that it was lactic acid which was developed in the microbic secretions, and that when this combined with the silver oxid there was developed a lactate of silver, and in this resided the antiseptic properties.

In this discovery lies the explanation of the value of silver wire as a suture. In aseptic, sterile wounds it is non-irritating and remains unchanged. In infected wounds it supplies in itself the base of a powerful antiseptic, combining with lactic acid, and forming thus in the tissues the lactate of silver.

The experience here recorded illustrates the principle so often insisted upon that clinical observation has its legitimate field and is a faithful guide, although the scientific explanation of the conditions and results observed are not, at the time, susceptible of a rational explanation. Sims' prophetic soul rested in the belief that some day a rational explanation of the fact he asserted would be forthcoming, and in this recent discovery of Credé it seems to be fulfilled.

ECHOES AND NEWS.

The Craig Colony for Epileptics.—The bill appropriating \$171,000 for buildings for the Craig Colony for Epileptics in New York has been signed by the Governor.

The New York Medical College for Women.—This institution held its thirty-fourth annual commencement exercises May 13th, and conferred diplomas upon seven graduates.

Honors for Drs. Welch and Osler.—At the annual meeting of the Academy of Arts and Sciences, May 12th, Drs. William H. Welch and William Osler were elected Associate Fellows in the Section of Medicine and Surgery.

The Duchess of Teck.—It is reported that the Duchess of Teck has been subjected to an operation for strangulated umbilical hernia. The operator was Mr. Herbert Allingham. No complication has arisen and recovery seems assured.

Yellow Fever at Quarantine.—When the steamer "Finance" arrived at New York from Colon, May 21st, it was reported that there had been one death on board from yellow fever. The eighty-eight passengers and crew were held for examination, and their effects and the steamer were thoroughly disinfected.

The X-ray and the Cinematograph.—Dr. John Macintyre of Glasgow has conceived the happy idea of combining the cinematograph with the fluoroscope and thus studying the movements of bones in living men and animals. If successful in this, there seems to be no reason why it may not be utilized also for studying or determining the heart's action.

Antivivisection in Congress.—Mr. Gallinger has reported favorably, from the Committee on the District of Columbia, the bill "For the further prevention of cruelty to animals in the District of Columbia." This bill proposes onerous and useless restrictions on the advancement of medical science. Every effort is being made, and it is hoped successfully, to prevent the passage of this bill by Congress.

A Medical Board for the New York Department of Corrections.—The visiting physicians and surgeons of the various institutions under the control of the Department of Corrections have organized a medical board independent of the Department of Charities. The board is composed of thirteen physicians and surgeons. Dr. J. P. Tuttle has been elected president, and Dr. P. R. Bolton, secretary.

The Hospital Graduates' Society Dinner.—The annual dinner of this thriving medical society was held Thursday evening, May 20th, at the Union Square Hotel, New York. A most sumptuous repast was discussed to the satisfaction of the hotel proprietor as well as those seated at the hospitable board, after which some instructive as well as amusing speeches were enjoyed, the program being enlivened by well-chosen musical selections.

New Portrait for the New York Academy of Medicine.—Dr. Webster, in behalf of some of the Fellows of the New York Academy of Medicine, presented to the Academy at its last meeting a large and handsome portrait of Dr. D. B. St. John Roosa, a former president. It is by E. Pollak. The gift was formerly accepted by Dr. E. G. Janeway, president of the Academy. It will be hung on the walls of Hosack Hall, with the portraits of other former presidents.

Doctor's Bills in Australia.—An Australian sent his consumptive son to a private hospital in Sidney, where he remained four months and was cured. The doctor sent in a bill for nearly \$4,000, which the father refused to pay, offering in settlement only \$200, whereupon the doctor sued him. After a three-days' trial the case was decided in favor of the defendant. According to Australian law

a doctor can sue only when he has a written agreement with a patient.

Nurses Receive Diplomas.—The graduating exercises of the Presbyterian Hospital Training School for Nurses, class of '97, were held at the hospital on the evening of May 13th. There were addresses by J. C. Kennedy, president of the school's Board of Managers, and by Dr. John S. Billings, as well as a lengthy musical program. Dr. Frederick Sturgis presented the diplomas and made an address. About 1500 persons were present. The graduates numbered twenty-two.

Entertainments of the American Medical Association.—In the list of entertainments of the American Medical Association at Philadelphia, published last week, two important ones, which promise to be very agreeable functions, were omitted. The Philadelphia County Medical Society gives a luncheon at the Hotel Walton on Tuesday, June 1st, at one o'clock. On the same day and hour, the trustees and faculty of the Philadelphia Polyclinic give a luncheon at the Polyclinic Hospital, Lombard street, above Eighteenth.

Antitoxin to be Tested.—The New York State Board of Health has decided that hereafter all antitoxin must be tested by the officials of the board before being placed on sale in the State. This is a very important step, as the use of antitoxin as a remedy for diphtheria is growing, and is proving more satisfactory in cases where the antitoxin has been properly prepared and is used with intelligence. The antitoxin sold in the market has been found to be unsatisfactory in some instances, and it is desired that it should be of uniform strength.

The Bubonic Plague.—The doctors sent to India by the Austrian government have reported to the Academy of Sciences at Vienna that neither Professor Yersin's nor Professor Haffkin's serum has been successful in the treatment of cases of bubonic plague. This is entirely at variance with special advices received by the MEDICAL NEWS direct from Professor Yersin through Professor Roux at Paris. Is it possible that such an indefinite report may have been inspired by jealousy of the French investigator, or does the diversity of opinion lie in the definition of what constitutes success?

The Risks and Sacrifices of Medical Men.—A phase of Professor Koch's work worth noting by those who denounce him as a monster because he experiments on pretty little guinea-pigs, is the deadly peril to himself that is incidental to his investigations, and especially in the preparation of his improved tuberculin. His report does not refer to this directly, but he warns other experimenters to remember constantly that they are dealing with the most fatal of bacilli and in their most active state. "The danger is not small," he says, "and I must confess that I have often felt, while at work, as though I were handling dynamite bombs."

Alcohol in Drug Stores.—The State Commissioner of Excise of New York has made the following ruling in the matter of filling prescriptions by regular pharmacists,

where the same contains alcohol or other liquor, *viz.*: That where, in good faith, a pharmacist is obliged, in the preparation of bona-fide medical preparations, to use alcohol or other spirits in the compounding thereof for the purposes of medicine, it is not a violation of the liquor-tax law so to do, although in a town where such medicine is prepared or prescription filled, the sale of liquor, as such, is prohibited under the different questions submitted under the local-option provisions of the liquor-tax law.

Board of Pharmacy, as Amended.—Mayor Strong has accepted the bill amending the Greater New York charter in the matter of appointment of a Board of Pharmacy to examine and register pharmacists in the city. The amendment gives the appointment of two of the members of the board to the New York College of Pharmacy, of a like number to the Kings County Pharmaceutical Society, and of one to the German Apothecaries' Society. Members of the board are required only to be competent pharmacists. Three-fifths of the net receipts are to go to the New York College of Pharmacy for its library fund, and two-fifths to the library fund of the Brooklyn College of Pharmacy. Penalties collected are to be divided between the institutions in the same proportion.

Free Baths in Boston.—The latest undertaking of the Metropolitan Park Commissioners is the building of a bathing pavilion at Revere Beach, within easy reach of the city limits. It will have accommodations for 1000 bathers. They have designed the most elaborate and complete bathhouse on the Atlantic coast. The landscape engineering in the vicinity of the bathing pavilion is the work of the late Charles Eliot, son of President Eliot of Harvard College. Every one of the 1000 bathers will have the benefit of privacy, and will reach the beach by means of a subway. The building will have every modern convenience, such as toilet-rooms, retiring-rooms, a large room for the distribution of bathing suits, electric lights, and a room for the storing of valuables. A big laundry will be capable of washing and drying 400 suits an hour. Only a nominal fee will be charged for the use of the bathing suits, which will be the only expense connected with the pavilion.

Life Insurance Doctors Discuss the Effects of Beer and Athletics.—The effects of beer drinking and violent exercise, such as bicycle riding, football, and track athletics on longevity were discussed at length at the annual meeting of the medical directors of the life insurance companies recently held in New York. Dr. Rogers of the New York Life said he had had occasion to make some study of what happens among persons engaged in the manufacture of beer, defined generally as brewers. It is a curious fact that the mortality among the proprietors is about as high as among the workmen, showing that they are all given to copious libations. Another curious fact is that the data indicates that Urtellos's point, emphasized by Dr. Bernacki, that mortality is very high at advanced ages, is very well borne out. The mortality is strikingly low among brewers in early years. Up to forty or thereabouts, brewers seem to be about as good risks as pretty much

anybody else. After forty the mortality rises very high, and at fifty-five or sixty years of age about three brewers may be expected to die where one average person dies. Dr. J. C. Young of the Mutual Benefit Life Insurance Company said that football, bicycling, and other athletic exercise greatly impaired a person as a risk. He had observed that after violent exercise the presence of albumen was discovered in the urine.

SPECIAL ARTICLE.

THE REPORT TO THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK OF ITS COMMITTEE ON THE ABUSES OF MEDICAL CHARITY.

(Transmitted May 24, 1897.)

MR. PRESIDENT AND GENTLEMEN: In accordance with a resolution acted upon at a meeting of this Society held in October last, a committee of eleven members was appointed to devise means for the control or correction of the abuses of medical charity now existing in this city. This committee was made up as follows: J. H. Burtenshaw (chairman), A. B. Ball, Hermann J. Boldt, E. S. Bullock, Henry D. Chapin, Carter S. Cole, Alexander Hadden, William M. Polk, W. Washburn, W. H. Weston, and F. H. Wiggin.

At the first meeting of this committee two steps were decided upon: (1) To ascertain the sentiment of the governing boards of the different dispensaries regarding the proposed effort to check indiscriminate dispensing of medical aid, and (2) to communicate with the Charity Organization Society of the City of New York with the object of ascertaining if a system might be devised whereby the worthiness of applicants for dispensary treatment might be investigated and reported, and if its cooperation might be relied upon to this end.

As a result of the last-named resolution, the fact was made known that the Charity Organization Society would willingly cooperate with this Society along the lines proposed, and that it would place its general offices and staff of assistants at the service of the County Medical Society free of cost, provided the extra expense attendant upon the proposed investigations was met by contributions from other sources.

In order to determine to what extent the cooperation of the dispensaries might be relied upon, a copy of the following letter was sent to the president, secretary, or physician-in-charge of each of the ninety-five dispensaries located in this city:

"DEAR SIR: The committee recently appointed by the Medical Society of the County of New York to devise means to correct the abuses of medical charity now existing in this city respectfully asks for answers from you, in your official capacity as an officer of one of the free medical dispensaries, to the subjoined questions:

"1. Does the governing board of the dispensary approve of the movement to abolish or regulate the abuse of medical charity?

"2. Will the governing board cooperate with the com-

mittee of the Medical Society of the County of New York and endeavor to dispense free medical treatment only to those applicants that are deserving and unable to pay a physician for such services?

"3. Will the governing board agree, at such time as called upon, to display in conspicuous places in the dispensary a placard reading somewhat as follows: 'On and after [date] the case of every patient applying for free medical treatment at this dispensary will be investigated, to determine if the applicant is deserving of free medical service,' providing such agreement is not to be construed as binding the dispensary to make such investigations on its own account.

"On behalf of..... DISPENSARY.

"(Signed)"

Replies to this letter have been received from 76 dispensaries. Of the 19 dispensaries ignoring the first circular letter, and a duplicate sent out on the 1st of April, 5 are homeopathic, 2 are under the supervision of the Department of Charities, and the remaining 12 are either private or church institutions at which but a small number of patients living in the immediate vicinity are treated. These replies were affirmative, or conditionally affirmative, to all three questions, with the exception of those received from the Dispensary of St. Mary's Free Hospital for Children, located at 435 and 437 Ninth avenue, and the Out-Patient Department of the New York Hospital, 21 West Fifteenth street.

The Dispensary of St. Mary's Free Hospital for Children treated 7101 patients during the year 1896, and during the same time the Out-Patient Department of the New York Hospital treated 9803 new patients, who made 45,832 visits to the dispensary, a majority, it is understood, being required to pay one dollar per month for the treatment received regardless of financial condition.

At a succeeding meeting of your committee it was made known that a committee having in view the same object as its own had been appointed by the County Medical Association, and that an organization known as the New York Medical Society for the Advancement of the Practice of Medicine had been formed, and on March 22d had caused to be introduced in the Legislature of the State a bill embodying certain reforms in the management of dispensaries in this city. It was the opinion of your committee that certain features of this bill were of too radical a nature to allow of its becoming a law at the present time; that any enactment designed for the control of dispensaries should apply to the entire State rather than to the city of New York alone; that, in the former case, the supervision and control of dispensaries should be placed in the hands of the State Board of Charities; and finally, that, as far as practicable, the efforts of the different committees formed for the same purpose should be directed along the same lines. Your committee feels that great credit is due the members of the New York Society for the Advancement of the Practice of Medicine, and the members of the committee of the County Medical Association for their efforts toward the control of the charity abuse, and thanks for their hearty cooperation with your committee toward this end.

The bill introduced in the Legislature by the first-named organization was ultimately amended so that its provisions read as follows:

SECTION 1.—By this act a dispensary is defined to be any institution, agency, or place, society or association, whose actual, or alleged, purpose it is to furnish gratuitously or at a merely nominal price to indigent, needy, or other persons not resident therein, medical, or surgical relief, advice, or treatment, medicine, or orthopedic, or other appliances.

Section 2.—On or after the first day of October, 1897, it shall not be lawful for any one to establish, conduct, or manage at any place in this State a dispensary not duly incorporated as such under the laws of this State, or not connected with another corporation and licensed by the State Board of Charities.

Section 3.—In no case shall a dispensary be established, carried on, or conducted in any place in this State commonly known as a drug store, nor in any place or building in the State defined by law, or by an ordinance of a Board of Health, as a tenement house.

Section 4.—It shall not be lawful for any person or persons to display the word "dispensary," or to cause the same to be published in any form, or in any manner, in order to attract any indigent, needy, or other person to any dispensary not duly incorporated or licensed, as provided in Section 2 of this act.

Section 5.—Any person who shall by means of any wilful false representations on his or her part obtain at any dispensary medical or surgical relief, advice or treatment, medicines, or orthopedic or other appliances, or any person who shall wilfully violate any of the provisions of this act shall be guilty of a misdemeanor and, upon conviction, shall be required to pay a fine of not less than fifty nor more than two hundred and fifty dollars.

Section 6.—The State Board of Charities is hereby empowered to make rules and regulations and to alter and amend the same when in its opinion necessary, in accordance with which indigent, needy, or other persons shall be given medical or surgical relief, advice or treatment, medicines, and orthopedic or other like appliances by such duly incorporated or licensed dispensaries, and the said Board is empowered, a chance for a hearing having been given, to annul the incorporation, or suspend the operations or to revoke the license of any dispensary for wilful neglect or failure on the part of its managers, trustees, officers, or employees to comply with the rules and regulations so established by said Board, but nothing in this act contained shall be considered to mean that said Board shall have power to determine the particular school of medicine under which the dispensary shall be conducted.

Section 7.—All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Section 8.—This act shall take effect on the first day of October, 1897.

This bill was passed without a dissenting vote by both Senate and Assembly on the 14th day of April last, but up to the present time has not received the signature of the Governor. This fact is peculiarly unfortunate as, according to the law of the State, all bills that do not re-

ceive the approval of the Governor within thirty days of the adjournment of the Legislature lapse and become void, and in the present instance this time limit expires at twelve o'clock to-night. This failure on the part of the Governor to approve the bill can perhaps be attributed only to pressure of official business, as at the date of adjournment of the Legislature, on April 24th, there were more than 700 enactments awaiting his signature.

The President of this Society, your committee, the President of the County Medical Association and the members of its committee, and the members of the Society for the Advancement of the Practice of Medicine have thoroughly appreciated the importance of this bill and the necessity of its becoming a law, and every influence at their command has been brought to bear toward this end. As no opposition was made to the passage of the bill in either branch of the Legislature, and as the profession, not only in this city, but throughout the State, is practically unanimous in commending its main features, the sense of disappointment is the more keen at the failure of the Governor to stamp the measure with the seal of his approval.

In anticipation of the bill being signed, the State Board of Charities, at a meeting held on the 14th of April last, appointed a committee of three of its members to hold public meetings immediately after the bill became a law for the purpose of receiving suggestions regarding the promulgation of rules for the management of dispensaries, and it was the intention of your committee to ask for authority from this Society to represent it before that body. In view of the failure of the Dispensaries bill to become a law, your committee is in a position only to recommend that the Committee on the Abuse of Medical Charity be continued indefinitely, and that it be empowered to take such steps as may appear to it advisable toward obtaining future legislation in the direction of correcting or controlling the medical charity abuse.

In conclusion, your committee expresses the conviction that there is no species of charity so beneficent, so far-reaching, or so generously bestowed as true medical charity, and that nothing could be further removed from its wish than that it should be curtailed or kept from the reach of the deserving poor; but it has been so conclusively demonstrated that there exists such gross and unpardonable abuse of that charity on the part of those who are not entitled to it that it has become imperative to adopt radical measures for the suppression of that abuse, and at once.

Respectfully submitted.

(Signed) JAMES HAWLEY BURTENSHAW, *Chairman*.
EARL SPRAGUE BULLOCK, *Secretary*.

A. B. BALL,
H. J. BOLDT,
HENRY DWIGHT CHAPIN,
CARTER S. COLE,
ALEXANDER HADDEN,
W. M. POLK,
W. WASHBURN,
W. H. WESTON,
F. H. WIGGIN.

CORRESPONDENCE.

OUR PHILADELPHIA LETTER.

[From our Special Correspondent.]

THE ATTENDANCE AT THE COMING MEETING OF THE AMERICAN MEDICAL ASSOCIATION—COMMENCEMENTS OF THE WOMAN'S MEDICAL COLLEGE AND MEDICO-CHIRURGICAL COLLEGE—PHILADELPHIA PEDIATRIC SOCIETY—SECTION ON GYNECOLOGY OF THE COLLEGE OF PHYSICIANS—FREDERICK DOUGLASS MEMORIAL HOSPITAL—CHANGES IN THE FACULTY AT THE PHILADELPHIA POLYCLINIC—DR. WILLIAM THOMSON.

PHILADELPHIA, May 22, 1897.

AS the time for the coming meeting of the American Medical Association approaches it grows more and more apparent what an important convention this is destined to become, both in the number of members in attendance, for it is now fully expected that the early anticipations for the attendance of three thousand will be realized, and in the importance of the scientific business transacted, from a synopsis of which it is evident that every field of medicine and of surgery will be fully covered. In some instances, it is to be regretted, there is such a plethora of material for thought and discussion, that the scientific value of the proceedings is threatened. However, the number of "read by title" papers will, as is always the case with these large gatherings, in all probability allow ample time for the discussion of those subjects which are presented at length.

On Tuesday, June 1st, there are to be special exercises held at the Academy of Music, commemorative of the fiftieth anniversary of the founding of the Association, at which addresses of historical interest will be delivered by prominent members.

In addition to the entertainments already provided for the visitors it is now announced that there will be an elaborate garden party on the campus of the University of Pennsylvania, tendered them by Provost Harrison, of this institution.

The forty-fifth annual commencement exercises of the Woman's Medical College of Pennsylvania were held in the Academy of Music, on May 19th. Degrees were conferred upon the members of the graduating class, which numbered twenty-eight, by Lucretia M. B. Mitchell, of the Board of Corporators, and an address delivered to the graduates by Professor Frederick P. Henry, of the Faculty. The annual dinner of the Alumnae Association took place the same evening at The Rittenhouse.

On May 18th the graduating exercises of the Class of 1897 of the Medico-Chirurgical College took place in the Academy of Music. Sixty-six members of the class received their degrees from the President of the Board of Trustees, C. William Bergner, and were addressed by Professor William E. Hughes. The Alumni Association of the College held its yearly banquet at the Hotel Stratford, on the evening of May 17th, at which speeches were made by Judge William B. Hanna, the Rev. C. Ellis Stevens, Rufus E. Shapley, C. William Bergner, Dr. John W. Croskey, and Dr. John V. Shoemaker.

At the last meeting of the Philadelphia Pediatric Society, held on May 18th, Dr. S. W. Morton presented an interesting discussion of the question of paralysis in children as a sequence to measles, and reported a case of this character; during the course of this paper, which was discussed by Dr. J. P. Crozer Griffith, Dr. Morton took occasion to draw attention to the dearth of text-book literature which exists on this topic, although here and there monographs on the subject may be found. A paper was also read by Dr. D. J. Milton Miller, detailing the history of a case of infantile scurvy, and discussing this rare disease.

At the last stated meeting of the Section on Gynecology of the College of Physicians, on May 20th, Dr. John C. Da Costa reported a celiotomy, in a woman five-months pregnant, for the removal of an ovarian cyst, and with restoration to its normal position of the retroflexed and adherent pregnant uterus, resulting in recovery without miscarriage, also of a dormoid cyst, of apparently rapid growth, and weighing twelve pounds, removed by abdominal section; and a large polyp, from a woman of advanced years.

Dr. J. Montgomery Baldy exhibited a specimen of a varicose condition of the veins of the broad ligament, which he removed on account of the intolerable pain suffered by the patient; the operation resulted in a complete cure of the symptoms complained of. Dr. Baldy suggested that this condition would probably explain the cause of many of the ills in women, in which the etiology is unaccounted for.

The first commencement exercises of the class of nurses of the Frederick Douglass Memorial Hospital occurred on May 21st, when two nurses who had completed their course of training in this institution were graduated. The event was one of interest in that it marks the end of the second year's existence of a hospital devoted exclusively to colored people, and engaged in the training of colored woman as nurses. The hospital, which is in a flourishing condition, was founded by Dr. N. F. Mossel, a well-known colored practitioner of this city, and is largely supported and managed by persons of this race. That there are many negro women desirous of taking up trained nursing as a calling is shown by the fact that there are at the present time more than one hundred applications on the waiting list for admission to this hospital's training school.

The resignation of Dr. Charles W. Burr, Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic, has been accepted by the trustees of the school. Dr. Burr's successor to the Chair has as yet been unnamed. In this institution Dr. G. Hudson Makuen has been elected Professor of Defects of Speech, a position recently created; and Dr. T. B. Schneideman to the Chair of Diseases of the Eye.

Dr. William Thomson, who recently resigned the Chair of Ophthalmology in the Jefferson Medical College, has been made Emeritus Professor of this branch, in recognition of his long and valuable services to this institution.

The Maine Medical Association.—The forty-fifth annual meeting of this society will be held at Portland, Wednesday, Thursday, and Friday, June 2d, 3d, and 4th.

OUR VIENNA LETTER.

[From our Special Correspondent.]

MEDICAL STUDENTS AT THE UNIVERSITY—POST-GRADUATE COURSES DURING AUGUST AND SEPTEMBER—THE INTERNATIONAL CONGRESS AT MOSCOW.

VIENNA, May, 6 1897.

THE official University announcements for the summer semester have just been published, and with them the number of students registered during the winter session. Altogether 7026 students were in attendance in all departments. Of these, 2752 were registered in the medical department, 1592 as regular students, 425 as special students, and 735 as taking post-graduate courses. Of the post-graduates, 118 are from America, North and South, most of them, however, from the United States. This is a larger number of post-graduates than are registered from any other country, even Austria itself, and serves to show how popular Vienna is with American medical students.

The proportion of medical to other students is somewhat more than one to three, and is about the proportion that exists everywhere in Europe, and about the same as occurs in our own universities. It is not surprising that complaints are heard on all sides that the profession is becoming overcrowded when more than one-third of all those receiving a university education are devoting themselves to medicine. The figures given do not represent the whole truth here on the Continent, however, for a certain number of those included among the philosophic students will later turn to medicine as the utilitarian completion of their education.

Among the announcements that seem of interest is that of the continuance of post-graduate work during the months of August and September. Somewhat as an experiment, a certain number of courses were continued during last summer, and with such satisfactory results that more are to be added this year. Visitors to the congress at Moscow, in August, will have an opportunity to do some work in Vienna before and after the congress, if so inclined, and may thus gain an idea of the very practical teaching methods of the Vienna school.

Another announcement is to the effect that, beginning with the winter semester in October of this year, the philosophic courses of the University will be opened to women on the same conditions as to men. Their admission to the medical department is put off for a time until certain contemplated reforms in the medical course are effected. Since the recent "promotion" of a woman to the Doctorate in Medicine the admission of women to full university privileges has been looked forward to with a good deal of assurance. The concession is commented on very favorably from nearly all sides, and though some of the opinions expressed show that there are certain ones who are inclined to be dubious as to the outcome of higher education for women, there has been no actual opposition to the movement. Women from foreign countries are excluded from these privileges, however, as students must be natives of the Empire, or at least *bona-fide*, permanent residents, and must have made their

preparatory studies successfully in one of the Austro-Hungarian gymnasia.

The reforms in the plan of medical studies spoken of have been in contemplation for some time. Certain purely scientific studies with only slight bearing on medicine, as mineralogy, zoology, and botany, are to be dropped from the course. The examinations in anatomy, physiology, chemistry, etc., which up to now could be put off till the last year, will have to be passed before the practical clinical work is taken up. Finally, one of the five years of the medical course will have to be passed in hospital service before the candidate will be given a license to practise. All the details of the proposed changes are not yet definitely settled, but these are the general lines along which they are to be made. At the same time the question of the remuneration of professors is to be definitely settled. The present unsatisfactory method (at least to some members of the faculties) of being paid according to the number of students in attendance on their courses is to be exchanged for the fixed-salary system. As things are now, some of the really scientific workers, but whose lectures involve theory rather than practice, are very unsatisfactorily paid because their courses are not attractive to students, while some of the lesser lights, particularly some of the specialists or professors whose examinations are known to be especially hard, are very handsomely paid by the crowds that flock to their lectures.

One of the most striking things in Vienna, I think, especially for the American medical student, is the autopsy-room of the *Allgemeines Krankenhaus* (General Hospital). Certain feelings of what one cannot help but call false respect, not for the dead but for dead bodies, make autopsies even in interesting cases comparatively rare with us. Even in State institutions too often the same mistaken feelings dictate that autopsies shall not be public. The result is that many a young doctor begins practice after having seen but two or three autopsies and with the haziest ideas as to the macroscopic appearance of diseased organs. The value of exact notions as to pathologic, anatomic lesions cannot be overrated. The false sentiment that now practically prevents this is of too serious importance to be permitted longer to exert the sway that it does if real progress is to be made in practical medicine. It is to doctors themselves that medicine must look for the gradual modification of the ideas that dictate the present policy.

Here every interesting fatal case comes to the autopsy-table. The practical importance of it for diagnostic purposes is evident any and every day. Out of the eight to fifteen daily autopsies at least one sometimes two or three reveal conditions that have been missed after the most careful diagnosis. Here are some samples of the last ten days. Clinical diagnosis: "Senile marasmus with hyperscoliosis;" vertebral caries (with a question mark). Report of autopsy: "Carcinoma of the stomach with metastasis to vertebrae; consequent softening of the bodies of two lumbar vertebrae, dislocation, and compression of cord."

Another case. Clinical diagnosis: "Pleurisy." Report

of autopsy: "Carcinoma of the stomach with metastasis to liver; some pleuritic effusion at base of lung." It was the lung symptoms evidently that had brought the patient to the hospital. The physical examination had brought out the fact of the presence of effusion which was thought to be much greater in quantity than it was owing to compression of the lung by a cancerous mass of considerable size just below the diaphragm. A third case. Clinical diagnosis: "Anemia from metrorrhagia; extra-uterine pregnancy; death from epistaxis." Report of autopsy: "Universal organic anemia; cystic conditions of both ovaries; adhesions to uterus; peri- and endometritis." All of these patients came to the hospital in the last stages of disease when opportunities for diagnosis were limited and when the hopelessness of the cases awakened little interest in the conditions present. There are good excuses for what are not mistakes but omissions of details in examination. The lesson they teach is an invaluable one, and it is only this perfectly blunt and cold-blooded comparison of the clinical with the *post-mortem* findings that can properly bring it out and make it impressive.

The authorities of the city of Moscow, and especially the medical profession, are said to be sparing no effort to make the visitors to the coming international medical congress thoroughly welcome. From St. Petersburg now comes the additional news that special arrangements are to be made there for the entertainment of the foreign attendants upon the congress, most of whom, it is confidently expected, will visit the capital during their Russian trip. The city has just appropriated 5000 rubles (nearly \$3000) for the entertainment of medical visitors. A general guide to the city and a special medical guide is to be issued for their benefit. The Court, it is said, is interested in producing a favorable impression on the visitors, and official circles generally will be led by this circumstance to make an effort to have the visit pleasantly remembered by all.

TRANSACTIONS OF FOREIGN SOCIETIES.

London.

EPIDEMIC OF INFANTILE PARALYSIS—MALIGNANT STRICTURE OF THE ESOPHAGUS TREATED BY SYMONDS' TUBE—SUCCESSFUL REMOVAL OF A TUMOR OF THE BRAIN—SARCOMA OF THE PROSTATE—HYDATID CYSTS OF THE PLEURA, MESENTERY, AND LIVER SUCCESSFULLY TREATED BY OPERATION—A RECTAL CALCULUS—A NEW ANESTHETIC INHALER.

At a meeting of the Clinical Society, held March 26th, PASTEUR read a paper on an epidemic of infantile paralysis limited to the children of one family. Every one of the seven children was attacked within a period of three weeks with fever of moderate severity and intense headache. In three of the children paralysis, not always of the same muscles, followed, within seven days, the beginning of the symptoms. In two others there was no paralysis, but tremors occurred, lasting a few days. In the remaining two cases there were no nervous symptoms.

Diphtheria and influenza were excluded, and a diagnosis

of infantile paralysis was made from the points of resemblance to that disease. These cases confirmed the growing impression that infantile paralysis is an acute infective disease.

CAYLÉ said that the cases were clearly instances of an acute specific fever. The term "infantile paralysis" is not always appropriate, and these cases show that anterior "poliomyelitis" is inadequate, since other lesions in the region of the anterior horn may be present. A satisfactory name would greatly stimulate clinical work upon this subject.

LOCKWOOD mentioned a case of malignant stricture of the esophagus treated with Symonds' tube, in which the safety-string was swallowed. Every effort to extract the tube failed. As it was not known whether the tube was still in the esophagus, it was decided to perform gastrostomy rather than esophagotomy. The operation gave much relief. The tube was not found, however. Three weeks later the patient died from bronchopneumonia, and the tube was found in the stomach at autopsy.

WASHBOURN and LANE described a successful removal of a tumor of the brain. The tumor grew from the pia, and deeply indented the brain substance immediately in front of the upper limit of the fissure of Rolando. The tumor was sharply defined, and shelled out easily, although there was a slight attachment to the gray matter at one point. The growth measured 2 by 1.5 inches, and had a depth equal to its breadth. The convolutions depressed by it were the precentral, with the adjacent area of the first frontal and part of the second frontal and marginal convolutions, and probably to some extent the gyrus fornicatus. The operation was followed by aphasia and paralysis of the right arm and right side of the face. The aphasia soon disappeared. Four months later there was complete motor paralysis of the right hand and forearm, with impaired sensation in the fingers. The facial paralysis had disappeared. The patient had been subject to fits before the operation, but there have been none since, and now (six months after operation) movement is returning in the fingers.

At the meeting held April 9th, MARSH reported a case of sarcoma of the prostate, in which death followed an exploratory operation. The tumor measured seven and one-half by four and one-half inches, and was inclosed in a firm fibrous capsule. It proved to be a spindle-cell sarcoma.

SPENCER described a case in which hydatid cysts were removed from the left pleural sac, from behind the mesentery, and from the right lobe of the liver. The pleural cyst was first removed, and, two months after the first operation, an abdominal incision was made, the mesentery cut through, and the cyst, which was situated behind the mesentery, and distinct from the liver, was removed. The wound was closed, and the cyst in the liver reached through an incision in the tenth interspace in the right mid-axillary line. The diaphragm was stitched to the upper edge of the wound, and then incised. The cyst was one and one-half inches within the liver. Fluid shreds and hooklets came away at first through the wound, which gradually healed up. Except in case of

the liver, the parasitic cyst was removed without tearing it by passing a stream of water from an irrigator between it and the adventitious cyst after the latter was freely opened.

Spencer pointed out the dangers of aspiration of these cysts; incision being far safer.

At the Pathological Society, April 6th, CRIPPS showed a *concretion removed from the rectum* of a woman, aged sixty-three, who had suffered from almost constant diarrhea, without hemorrhage. The stone weighed nearly eight ounces. Its origin was unknown.

At a meeting of the Society of Anesthetists, held March 18th, HOLIDAY showed a *new anesthetic inhaler*, which consisted of a small bottle with a wide neck, to which was fitted a cork bored for the passage of two tubes. One admitted air to pass over the chloroform, and to take up its vapor, while the other allowed the escape of the mixture of air and vapor. The current of air is kept up by a small bellows, which forces it on toward a mask fitted over the patient's face. Recovery after the use of this inhaler is prompt, and unaccompanied by the nausea which usually follows anesthesia by the open method.

Berlin.

INTERNAL DERANGEMENT OF THE TEMPOROMAXIL-LARY ARTICULATION—POSSIBILITY OF DISSOLVING URIC-ACID CALCULI.

At the session of the Medical Society, held March 10th, BRUCK presented a girl, aged twenty, who, three months previously, was greatly troubled by a *cracking in the left articulation of the jaw*, coming on not only in chewing, but at every attempt to open the mouth. Accompanying this was a darting pain, and at times an inability to close the mouth. The noise was so loud that she was made sport of by her companions, and fell into the habit of swallowing her food without chewing it, a procedure which speedily caused indigestion and constipation.

Examination showed that if pressure was made with a finger-point upward and inward upon the offending joint, the crack was not heard. It was suggested that the patient wear, during meals, a sort of truss, which should press upon the joint in the manner described, while retaining its own position by a band about the head.

At the session held March 24th, MORDHORST said that he did not share the common belief that there are no efficacious means of dissolving uric-acid calculi. His experience has shown him that every alkaline urine not containing too much of any calcium salt is capable of dissolving uric-acid calculi. The popular belief in the insolubility of these calculi is due to the following facts: If one of these stones is held in a glass of alkaline urine it immediately begins to dissolve. If the urine is very strongly alkaline, the dissolved salts remain in the neighborhood of the stone, and a stroma is formed, visible under the microscope. From the stroma organic substances are dissolved, which unite with the alkali, and form a complete bark, as it were, around the stone, thereby preventing the further action of the alkali upon the uric acid. In other words, the uric-acid calculus is completely surrounded by a layer of urates. If, however, the urine in which the calculus

is suspended is frequently changed, these urates will be dissolved, and more and more of the calculus will be exposed to the solvent action of the urine. Exactly the same action may take place in the body. It is immaterial what medicine is employed to make the urine alkaline. Mineral waters taken for this purpose must not contain much calcium, however, because the salts of calcium delay the solution of organic substances. Mordhorst stated, further, that this was not a matter of theory merely, but that in numerous cases he had seen fairly large calculi broken up and voided under the influences of copious draughts of a suitable mineral water.

KUTNER expressed doubt as to the correctness of Mordhorst's explanation of these clinical phenomena. He had had no opportunity to observe them himself, but he expressed himself as convinced that the great increase of urine had mechanically flushed out of the recesses of the pelvis of the kidney, or of the bladder, the calculi which were lodged there, and that the much-wished-for "solution" was by no means proven.

SOCIETY PROCEEDINGS.

AMERICAN LARYNGOLOGICAL ASSOCIATION.

Nineteenth Annual Meeting, Held at Washington, D.C.,
May 4, 5, and 6, 1897.

SECOND DAY—MAY 5TH.

(Continued from page 654.)

DISCUSSION ON ATROPHIC RHINITIS.

DR. W. E. CASSELBERRY of Chicago opened the discussion, speaking on nature and symptoms. He said that the affection might occur in either the young or old. No one theory of causation was borne out by all cases. The latter were fetid and non-fetid. The atrophy may be due to one and the odor to another. The writer would incline to a division of cases of atrophic rhinitis into (1) simple dry catarrh and (2) ozena, and in a general way the lesions consisted of atrophy in all stages, with possibly a degeneration of the mucous glands and crust formation.

The theory of a primary central trophic neurosis has been advanced. Support is lent to this view by the fact that the disease is generally bilateral. It is true that in case of deviated septum, the affection seems more advanced on the concave side, but as soon as the position of the cartilage is rectified, the nostril improves and the mucosa often assumes a healthy appearance.

In both types the atrophy varies in degree and distribution. Hypertrophy need not exhaust itself before atrophy begins. The middle turbinate may be hypertrophied and the inferior atrophied. Grünwald has claimed that most cases of atrophic rhinitis are due to sinus disease, but this theory has not been generally accepted. Bosworth has referred the disease to a previous suppurative disease of the nasal mucosa. The fetor of these cases has been referred to a microbic origin. Fränkel and Löwenberg have isolated a coccus; Abel has found a bacillus mucosus; Wyatt Winpary, various hyaloid bodies, possibly of

a microbic nature; while more recently Belfanti and Della Vedova have found a bacillus closely corresponding to that of diphtheria.

Symptoms frequently include, in addition to those directly referable to the nose, impaired hearing and voice. Ear symptoms may precede the nasal.

The discussion was continued by DR. J. N. MACKENZIE, who spoke of the structural changes occurring in the disease, and the order of their appearance. It must be remembered that we are dealing with changes in an important physiologic organ as well as in a mucous membrane. At present, there is a haze of opinion about the matter. The term atrophy is used in a loose sense. We fail to discriminate between the different forms of atrophy and the different causes producing them. There may be simply atrophy and again one of degeneration. The ideal term is sclerosis, where we may have an atrophy of the specific nasal tissues and a hypertrophy of the surrounding connective tissue. There is a cell infiltration, granulation tissue, obliteration of old and formation of new vessels. Sclerosis may result from blood infection, as from tubercle and syphilis, or from intoxication, especially that of alcohol. Preceding purulent catarrh is probably not a cause, for such a sequence has no known parallel in any pathologic processes with which we are acquainted. The task of the future is to detect the origin of this sclerotic process. The disease may be atropic, *ab initio*, commencing in the periosteum, but this is improbable from the clinical, as well as the anatomic, appearances observed.

DR. C. C. RICE of New York spoke on treatment. This should be constitutional and local. The former would include in the broadest sense the various hygienic measures. He had seen one group of cases improve by removal to the country and the change of occupation from factory to farm. In general, we had to aim at cleanliness and stimulation. The latter might be accomplished by anyone of a number of drugs, by electricity, cataphoresis, tampons, etc. We should be careful to avoid any destruction of tissue. He considered the oily preparations as of great value, both from their power to lubricate and to act as vehicles. The nasal douche cup would carry sufficient fluid for each act of cleansing. He was accustomed to apply the oily preparations by friction, polishing as it were the inside of the nose. In young children with profuse watery secretion powders might be used, not otherwise.

THIRD DAY—MAY 6TH.

SIMULATED SARCOMA OF THE TONSIL; REPORT OF A CASE.

THIS paper was read by DR. D. BRYSON DELAVAN of New York. The tumor grew on the left tonsil of a man aged forty-five, who had a negative family history, and who presented no syphilitic manifestations. The tonsil was moderately enlarged and sore. Its central portion was broken down, leaving a hollowed surface with overhanging edges. The rest of the organ was indurated. There was an enlargement of a gland under the jaw, with pain on palpation and swallowing. The patient was

placed on potassium iodid while a bit of the tonsillar tissue was given to Dr. Hodenpyl for examination. Several other pathologists examined it, and pronounced it sarcoma. Dr. Hodenpyl was not sure of the correctness of this view. Under the iodid the glandular enlargement disappeared. The tonsil was removed with a cold snare. The microscopic examination showed chronic hyperplasia, with a large amount of endothelial cell growth, the arrangement of the histologic elements suggesting sarcoma; but after removal the patient did well, and has been in good health since. The case was therefore to be regarded as one of simulated sarcoma.

A NEW METHOD OF PERMANENT RELIEF FOR CERTAIN ENLARGEMENTS OF THE TURBINATED BODIES.

DR. DELAVAN also read a brief paper with this title. He deplored the over-use of the cautery, and thought that much of its employment was futile, as its effects were superficial, and but temporary in duration. The mucosa was also unnecessarily destroyed. He suggested the employment of a small knife, such as is used in eye work. Under cocain the knife may be passed into the turbinated bone, swept around through the tissues, and withdrawn through the same opening, care being taken not to enlarge the latter. It is better to operate a second time rather than to cut too deeply at first. Pain and bleeding are both slight. The latter should be allowed to stop of its own accord. It is also advisable to use cocain freely for some hours after operation.

DR. CASSELBERRY thought that, while this procedure would be of service in anterior enlargements, it would not answer when the enlargement was posterior. He alluded to the method of submucous linear cauterization as practised by Dr. Pierce of Chicago.

DR. WRIGHT said, with reference to the case of tonsillar tumor reported by Dr. Delavan, that it was hardly fair to a pathologist to give him only a bit of tissue and expect him always to make a definite and reliable diagnosis. The pathologist should be given all information possible relative to a given case.

A CASE OF SUBGLOTTIC TUMOR CAUSING GREAT DYSPNEA; REMOVAL BY TRACHEOTOMY AND CURETTAGE

was reported by DR. JOHN W. FARLOW of Boston.

The case was that of a woman aged thirty-seven, the history dating back four years. One year after the onset of her trouble she came under the care of a physician in St. Louis, who noted a thickening of the septum nasi. At this time the woman was having so much difficulty in breathing that a tracheotomy was performed. It was found that there was a tumor on the posterior wall of the trachea, pressing on and partially occluding the lumen of the esophagus. It was sessile in character, three-eighths of an inch wide, and one and one-eighth inches long. The color was brown and the consistency soft. Removal was deemed inadvisable, owing to the fear of producing an unmanageable tracheo-esophageal fistula. After the tracheotomy the breathing was greatly improved. She continued well, with only occasional discomfort, until January, 1897, when she came under Dr. Farlow's observation. Her breathing was then difficult and wheezing.

Examination of the larynx showed the cords to be freely movable. The voice was not hoarse. A tumor could be seen filling the trachea below the cords, and presenting the appearance of being made up of several distinct masses. A non-malignant diagnosis was made, the growth being considered an enchondroma. A low tracheotomy was performed, and the trachea opened above the tube. The tumor was found to consist of one mass, with a lobulated superficial division. It was removed with the curette without difficulty, and, on examination, proved to be a fibroma.

PAPILLARY EDEMATOUS NASAL POLYPLI AND THEIR RELATION TO ADENOMATA.

DR. JONATHAN WRIGHT of Brooklyn read a paper with this title.

He reviewed the literature of a series of reported cases, and added notes of some which had come under his own observation. The point made in the paper was that there are a series of intranasal growths which to the unaided eye look exactly like the ordinary polyp and which are in reality quite different. There may be a gradual shading of one into the other so that all grades of transition are seen from the ordinary polyp to the true adenoma.

A CASE OF ADENOCARCINOMA OF THE NOSE.

This paper was read by DR. F. E. HOPKINS of Springfield, Mass. The case was that of a man eighty-three years of age whose family had a tuberculous taint but was free from tumors. Nasal obstruction had existed for twelve years with a watery discharge, but no pain or bleeding. A growth was found in the nose and its removal was attempted, but on account of hemorrhage, was abandoned. Shortly afterward some masses resembling polyps were removed. In April of the present year the patient came under the observation of the writer. No operation had been performed during the previous three years. At that time he was troubled with occasional bleeding at the nose and with a constant sanious, foul-smelling discharge. The left eye was displaced outward. The nasal septum had been crowded over to the right side posteriorly. With a cold wire snare, the mass was removed without difficulty. Bleeding was slight. Examination of the tumor showed in some places a tubular and in others an acinous arrangement of cylindrical cells and a few additional irregular cells masses.

DR. SWAIN called attention to the similarity of structure between the ordinary polyp of the ear and the papillary adenomata found in the nose. He believed that the papillary appearance was due to the fibrous tissues as well as to the cell elements.

A CONTRIBUTION TO THE STUDY OF LARYNGEAL PHTHISIS,

was the title of a paper by DR. T. MORRIS MURRAY of Washington. The writer had presented a paper on this subject in 1894 and the present communication was a review of the progress made since that time. He spoke of the good effects he had had with enzymol as a digester of necrotic tissue. He believed that the internal use of creosote is of the highest value.

DR. E. FLETCHER INGALS of Chicago said that he

preferred the carbonate of creosote to creosote itself. The former could be given in even dram doses and was much better borne by the stomach.

The next paper, entitled

PRIMARY LUPUS OF THE LARYNX

was read by DR. EMIL MAYER of New York. He gave the history of two cases occurring in his experience. The first was of a man aged thirty. One week before coming under observation he had coughed up blood, and had had small daily hemorrhages for a week after. Cough, dysphagia, hoarseness, and fever were all absent. Examination showed the entire surface of the laryngeal aspect of the epiglottis to be ulcerated. The edges of the ulcer were granular and were covered with a whitish deposit with numerous small nodules on the free edge. The deepest point of ulceration presented an erosion like the open mouth of a small vessel. The arytenoids were normal. There were no bacilli in the sputum. There was no evidence of syphilis, but there was a small spot of consolidation at the apex of the left lung.

Under lactic acid applications, with menthol, and the use of creosote internally, the patient improved rapidly, the hemorrhage never returning after the third day. Ten months later, it was found that the epiglottis was thickened, with a nodular excavation in its central portion. In addition, the mucous membrane of the epiglottis adjacent to the ulcer, was puffy and edematous. The edematous folds hung like pouches over the larynx, obscuring its interior. The lung condition was about the same as when first noted.

Primary lupus of the larynx, while rare, undoubtedly does occur. Fourteen other cases have been reported. The condition must be differentiated from tuberculosis, syphilis, carcinoma, and leprosy.

The reader of the paper drew the following conclusions: (1) Primary lupus of the larynx does exist. (2) It is a painless affection and may go on for years unnoticed. (3) Tubercle bacilli are present in small numbers, although difficult to find. (4) Its similarity to syphilis in appearance is greater than that of tuberculosis. (5) The absence of adhesive bands is characteristic of lupus, while always present in late syphilis. (6) The prognosis as to life is remarkably good.

FOUR CASES OF SARCOMA OF THE NASAL CAVITIES were reported by DR. J. E. H. NICHOLS of New York.

Several papers were then read by title.

DR. JOHN O. ROE of Rochester exhibited an instrument for dilating the trachea in cases of stenosis.

The following were elected to active membership; J. Payson Clark, M.D., Boston, Thesis, "Nasal Polypi"; J. Edwin Rhodes, M.D., Chicago, Thesis, "Atrophic Rhinitis"; James E. Logan, M.D., Kansas City, Thesis, "Laryngitis Rheumatica, with Report of a Case"; Richard Frothingham, M.D., New York, Thesis, "Benign Retropharyngeal Tumors, with Report of Cases." H. Luc, M.D., of France, Paris, was elected to corresponding fellowship.

The annual election of officers resulted as follows:

President, Thomas R. French, M.D., of Brooklyn; first vice-president, Alex. W. McCoy, M.D., of Philadelphia; second vice-president, Herbert S. Birkett, M.D., of Montreal; secretary and treasurer, Henry L. Swain, M.D., of New Haven; librarian, J. H. Bryan, M.D., of Washington.

It was voted to hold the next Congress in Brooklyn, the date to be selected by the Council.

AMERICAN PEDIATRIC SOCIETY.

Ninth Annual Meeting, Held at Washington, D. C., May 4, 5, and 6, 1897.

THE first session was opened by the President, DR. SAMUEL S. ADAMS of Washington, who delivered an address entitled "The Evolution of Pediatric Literature in the United States." In this address he reviewed, in chronological order, the various works on the diseases of children which have been written in this country during the past one hundred years. Every author writing upon this subject before 1870 was mentioned. Since that date the contributions have been too numerous to receive individual mention. The first definite contribution to pediatric literature was made by Dr. Rush in 1789, in a description of influenza. Following this were mentioned the names of Caldwell, 1796; Steuart, 1806; *The American Matron*, 1810; Jackson, 1812; Miller, 1814, and Logan, 1825. There were numerous contributions between the last-named date and 1848, when J. Forsyth Meigs published his important work on the "Diseases of Children," the last two editions of which appeared under the authorship of Meigs and Pepper. The next important name in pediatrics appeared ten years later, when Jacobi wrote his first paper on children. It is also notable that J. Lewis Smith wrote his first paper on children in the same year. The first edition of his well-known work on diseases of children appeared in 1869. The most important works that have since appeared on this subject are those of Keating, in 1889; Starr, in 1894; Sachs, 1895; Rotch, 1895, and Holt, 1896.

DR. JAMES C. WILSON read a paper on "Tic Convulsif," and reported a case which belonged to the class of nervous diseases which includes the "jumpers," described by Beard.

DR. B. SCHARLAU presented a synopsis of fifty-six cases of empyema operated upon during 1896 with very favorable results.

DR. W. D. BOOKER reported a case of congenital diaphragmatic hernia associated with recurrent attacks of asthma dyspepticum. During one of these attacks the child died, and the true pathologic conditions were revealed by the autopsy.

DR. J. P. CROZER GRIFFITH reported two cases of unilateral tremor in children.

DR. J. HENRY FRUITNIGHT read a paper on the "Frequent Significance of Epistaxis in Children."

He believed that this symptom was frequently the result of cardiac disease, and should always receive full attention.

DR. GEORGE N. ACKER reported two cases of meningitis, apparently tuberculous in nature, with recovery.

DR. JOSEPH O'DWYER reported a case of congenital stenosis of the larynx, in which relief was obtained by gradual dilatation with steel sounds.

DR. WILLIAM OSLER read an extended paper on "Adherent Pericardium in Children," and reported cases.

DR. A. JACOBI reported a case of sarcoma of the skin in a newly born infant, and read a paper on the origin of such growths.

DR. F. GORDON MORRILL reported an analysis of one hundred cases of frank pneumonia, that term being used rather than lobar pneumonia, because of the confusion caused by the use of the latter term when applied to the pneumonias of children.

DR. FLOYD M. CRANDALL read a paper on "Hereditary Tendency in Pediatric Practice," and called particular attention to certain misapprehensions which sometimes arise regarding that subject.

DR. B. K. RATCHFORD read a paper on the "Symptoms of Lithemia as they Appear in Children," and considered the special symptoms in detail.

In a paper on "Retro-esophageal Abscess," DR. J. P. CROZER GRIFFITH called particular attention to the great difficulties experienced in making a diagnosis of that condition.

DR. C. G. KERLEY reported a case of exophthalmic goiter apparently cured by the use of thyroid extract. The case was an undoubted one, and the beneficial effects of the extract seemed to be equally clear.

DR. HENRY KOPLIK reported the extensive use of thyroid extract for the purpose of testing its value in different diseases of the blood and bones, and his conclusions suggested its more general use in these diseases.

DR. FRANCIS HUBER also presented a paper reporting "A Cure of Goiter by Thyroid Extract."

The report of the Committee on

THE COLLECTIVE INVESTIGATION OF THE ANTITOXIN TREATMENT OF LARYNGEAL DIPHTHERIA IN PRIVATE PRACTICE

was read by the Chairman, DR. W. P. NORTHRUP, the conclusions being as follows: (1) The mortality of laryngeal diphtheria at present rests at 21.12 per cent.; (2) that sixty per cent., approximately, have not required intubation; (3) that the mortality of operated cases is at present 27.24 per cent.

DR. JOSEPH O'DWYER read an important paper on "Retained Intubation Tubes," this term being used to mean the necessity of continuing intubation long after the disappearance of the original disease.

DR. T. M. ROTCH reported cases of diphtheria of the eye and discussed the subject of antitoxin in diphtheria.

DR. HENRY KOPLIK exhibited an apparatus by which the bacteriologic diagnosis of diphtheria could be made within three or four hours.

DR. EDWARD P. DAVIS presented an important contribution on "Prenatal Infection in Infancy," causing diseases which develop during the first month of life.

DR. IRVING M. SNOW reported a case in which poisoning by acetanilid had resulted from the absorption of that drug in the umbilical wound.

DR. T. M. ROTCH presented a specimen of ilioocolitis,

and DR. R. G. FREEMAN presented an improved nursing bottle.

Papers were read by title by Drs. J. Lewis Smith, W. F. Lockwood, W. P. Northrup, R. G. Freeman, H. D. Chapin, Francis Huber, C. G. Jennings, and C. P. Putnam.

The following officers were elected for the ensuing year: President, Dr. L. Emmett Holt; first vice-president, Dr. Henry Koplik; second vice-president, Dr. Charles G. Jennings; secretary, Dr. Samuel S. Adams, recorder, Dr. Floyd M. Crandall; treasurer, Dr. F. A. Packard; member of Council, Dr. Charles P. Putnam.

The following were elected members: Dr. J. H. McCollom, Boston; Dr. J. P. West, Bellaire; Dr. Churchill, Chicago; Dr. E. E. Graham, Philadelphia; Dr. Harold Williams, Boston.

The subject of infantile scorbutus was selected for collective investigation, the report to be made at the next meeting. The following committee was appointed: Drs. W. D. Booker, J. P. Crozer Griffith, C. G. Jennings, A. Caillé, and J. Lovett Morse.

Cincinnati was named as the next place of meeting, the exact date of which was not decided.

AMERICAN OPHTHALMOLOGICAL SOCIETY.

Thirty-third Annual Meeting, Held at Washington, D. C., May 5 and 6, 1897.

FIRST DAY—MAY 5TH.

The President, DR. GEORGE C. HARLAN of Philadelphia, in the Chair.

DR. J. A. SPALDING of Portland, Me., read a paper on ENUCLEATION OF BOTH EYES, OWING TO PANOPHTHALMITIS, IN A CASE OF EXOPHTHALMIC GOITER.

DR. W. F. AIKEN of Savannah reported a case of exophthalmic goiter in which the eye first became prominent after etherization for a surgical operation. The case gradually improved for two years. Vision continued normal.

DR. W. H. WILDER reported three cases of pulsating exophthalmus—the first his own, the second in the service of Dr. Ralph Isham, and the third Dr. Beard's case. His conclusion was that ligature of the common carotid gives the best result.

DR. S. M. BURNETT of Washington, D. C., reported a case of double exophthalmus, with destruction of eyes, in an infant, starting probably from the dura near the cella turcica, with exhibition of the specimen, which he considered a sarcoma strictly localized.

DR. J. O. TANSLEY of New York spoke of having seen a number of cases of exophthalmus, and quoted briefly from two.

DR. LUCIEN HOWE of Buffalo, N. Y., exhibited a case of

CHRONIC PSEUDO-MEMBRANOUS CONJUNCTIVITIS, and remarked upon its pathology and the difficulties in the way of treatment.

DR. MYLES STANDISH of Boston read a paper on DIPHTHERITIC CONJUNCTIVITIS.

He had seen rapid and permanent benefit from injections

of antitoxin, and believed it advisable to repeat the injection as often as necessary to keep up the improvement.

DRS. G. E. DE SCHWEINITZ of Philadelphia and JOHN E. WEEKS of New York spoke in confirmation of the conclusions of Dr. Standish.

DR. GEO. C. HARLAN reported a new operation for prosthesis in cases of cicatricial orbit, showing photographs and specimens of lead wire and shell used in the procedure.

DR. W. F. NORRIS of Philadelphia reported a case of ivory exostosis of the orbit, and DR. ROBERT SATTLER of Cincinnati presented a supplementary report of a case previously related to the Society.

DR. EDWARD JACKSON of Philadelphia reported a case of unique intra-ocular tumor, characterized by rapidity of onset, inability to close one eye without closing the other, and rapid loss of vision. Diagnosis before operation, sarcoma of choroid; after enucleation, tumor was found, partly of the consistence of bone.

DR. W. B. JOHNSON of Paterson reported a case of angiosarcoma, of probably retinal origin, with specimen mounted in gelatin, which Dr. Weeks thought should be called angioglioma.

DR. WILLIAM THOMSON reported two cases—one of a foreign body in the lens, which was removed entire in its capsule, and the resulting vision was $\frac{7}{8}$; and after a blow on the eye, which reopened the wound, the final result was V- $\frac{1}{2}$. In the second case, the foreign body was located by means of radiographs and a system of triangulation, in a fibrous band extending forward from the retina; an opening was made and a piece of the band containing the encapsulated foreign body removed.

DR. WM. M. SWEET of Philadelphia demonstrated the method of triangulation used. DR. C. A. OLIVER demonstrated a method of triangulation, which he regarded as more practical than that of Exner.

The Society then went into executive session.

SECOND DAY—MAY 6TH.

The second session was opened at nine o'clock with the relation of

THE REMOVAL OF AN EPITHELIOMA OF THE LOWER LID,

by DR. C. H. WILLIAMS of Chicago, Ill., the interesting feature being the production of anesthesia by cocaine cataphoresis.

DR. ROBERT SATTLER related a case of congenital ptosis and epicanthus with operation and photographic exhibit, showing other members of the family affected.

DR. W. H. WILDER reported a new operation for ptosis, stating the objections to the operation of Panas. His own operation consisted in a folding of the tarso-orbital fascia and getting a hold on the occipito-frontalis muscle, which leaves the orbicularis uninjured. DR. C. A. OLIVER reported two cases of resection and advancement of the levator-palpebrae muscle in traumatic ptosis, with blackboard demonstration.

DR. G. M. GOULD of Philadelphia, Pa., read a paper on the

LAW OF REFRACTION—CHANGE FOLLOWING INCREASE OR DECREASE IN BODY-WEIGHT.

(To appear shortly in the MEDICAL NEWS.)

DR. WILLIAM THOMSON exhibited an achromatic cataract lens, made by Bausch, with the main glass of crown glass, the added portion flint glass, with remarks upon its clearness of definition. DR. S. D. RISLEY of Philadelphia related two cases of saccharin diabetes, accompanied by refractive changes varying with the changes in the general condition of the patient. When the sugar disappeared the hypermetropia increased, and when it reappeared the hypermetropia diminished.

DR. E. FRIDENBERG of New York thought that the changes noticed by Dr. Risley were perhaps due to changes in the index of refraction of the media, and that the cases of Dr. Gould might be partially explained in the same way. DR. S. THEOBALD thought that perhaps some of Dr. Gould's cases might be explained by the measurements, possibly representing more than the true amount of myopia, and less than the true amount of astigmatism.

DR. GOULD, in closing the discussion, stated that in the cases quoted the ciliary muscle had been paralyzed by a mydriatic, but DR. THEOBALD thought that a mydriatic might not always entirely eliminate action of the ciliary muscles.

DR. R. L. RANDOLPH reported a second series of cataract extractions, numbering 147, of which in 107 an iridectomy was made, and 42 were simple extractions. He found the failures not due to prolapse, but to simple iritis, as in cases where iridectomy had been performed.

DR. O. F. WADSWORTH of Boston, Mass., reported

CASES OF INTRA-OCULAR HEMORRHAGE DURING AND FOLLOWING CATARACT EXTRACTION.

In the first case, after the section, a stream of blood flowed from behind and below the iris over the lens, followed by prolapse of iris, ending in atrophy of eyeball. Second case, section as usual with similar result, the blood forcing the corneal flap to fold over. In the third, a case of simple extraction, prolapse of iris occurred, followed by blood. Eye enucleated. This patient died of apoplexy a year later. In the fourth case, fifteen minutes after operation, there was prolapse of iris and vitreous. The fifth case was an American woman in good, general health and with good projection. After the removal of the lens, there was sudden pain, protrusion of vitreous, followed by blood.

DR. L. A. W. ALLEMAN of Brooklyn, N. Y., reported a case of cholesterol crystals in the opaque lens of a child. The lens was needled, and as much as possible removed by suction.

DR. S. B. ST. JOHN of Hartford, Conn., wished to emphasize the practicability of cataract extraction without expert assistance. In doing iridectomy he put cocaine into the anterior chamber and waited a minute or two, when the iris was cut with no pain.

DR. DAVID WEBSTER of New York reported a case of cataract extraction, with intra-ocular hemorrhage and protrusion of vitreous, retina, and he thought choroid. He enucleated the eye a few days later.

DR. S. O. RICHEY of Washington, D. C., read a short paper on

TAXIS IN INCREASED INTRA-OCULAR TENSION.

He referred to the position of the *venæ vorticosæ* in their passage through the sclera, and suggested the transfer of attention from the anterior to the posterior segment of the eyeball.

DR. G. E. DE SCHWEINITZ of Philadelphia, Pa., related a case of tobacco amblyopia, with autopsy and microscopic examination of the specimens, showing the nerve bundles affected, and DR. S. THEOBALD related a case of marked impairment of central vision following prolonged use of the affected eye in calibrating burettes, with paracentral scotoma. Treatment was pilocarpin, followed by mercuric biniodid, with a result of V- $\frac{3}{4}$.

DR. J. A. SPALDING of Portland, Me., reported a group of four cases of optic-nerve atrophy following sexual excess. The results were gradual loss of useful vision, though not total blindness. Two became victims of phthisis, the third was committed to an insane asylum, and the fourth committed suicide.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Twenty-first Annual Meeting, Held at Washington, D. C., May 4, 5, and 6, 1897.

FIRST, SECOND, AND THIRD DAYS.

THE proceedings were opened with an address by the President, DR. JAMES C. WHITE of Boston. He reviewed the work of the Association in connection with the many advances in dermatology, and said that the amount of data gathered during the twenty-years' existence of the Association was of inestimable value. In addition to the numerous systems, treatises, atlases, etc., published by the members, 327 papers of value had been contributed to the Association, and the journal devoted to this special branch had reflected great credit upon its various editors. American dermatologists might well feel a sense of satisfaction in the part they had taken in separating and classifying various confused groups of disease, and the future of the Association seemed very bright.

A CONTRIBUTION TO THE STUDY OF BLEEDING STIGMATA

was the title of a paper presented by DR. J. N. HYDE of Chicago.

A peculiar and seemingly unique instance of spontaneous bleeding from the skin was related as having occurred in a male subject. In spite of his residence in a healthy, non-malarial district, the plasmodium was repeatedly discovered in the blood, though neither the spleen or liver was enlarged. The bleeding was from a single point at a time, and continued as long as six months during one attack. There was no hemorrhage from any mucous membrane.

HYSTERICAL DERMATONEUROSES

was the title of the next paper, which was read by DR. VAN HARLINGEN of Philadelphia. Four cases of his own were reported, and three occurring in the practice of

others were mentioned. They all concerned young girls, some of whom were hysterical, and for the most part anemic. In one woman crops of bullous lesions were present, which continued over a period of two years. In one young girl three attacks followed her being sent to school against her will, and a fourth was called forth by the mere mention of school. They subsided upon the patient being kept at home. The speaker thought all these reported instances were due to a definite process, and that we are warranted in supposing an internal cause of the malady to be present. The title "neurotic excoriation" was not sufficiently exact to be retained; hysteria was looked upon as the condition upon which the cutaneous lesions depended.

Many lesions undoubtedly appear as though self-inflicted, although the term "feigned" cannot apply to them.

LINEAR NEVUS

was discussed from the standpoint of etiology and pathology by DR. P. A. MORROW of New York. Of the many names proposed for this affection, he had chosen the one he thought best suited for it. He would drop the qualitative term neuropathic as unwarranted. He reported two instances, one affecting the side of the neck and back in a young woman, the other running down the arm and over the palm to the tip of one of the fingers in a man. He thought there were diverse clinical varieties of this wart-like nevus, and that while not strictly limited to one side of the body, nor to any particular nerve distribution, the affection bears a close analogy to zoster, which is now known to be of nerve origin.

The histologic examination of his cases had shown the changes habitually noted in this affection. Both instances reported had developed long after childhood, and had existed twelve and seven years, respectively.

THE VARIOUS FORMS OF PITYRIASIS AND THEIR RELATION TO ERYTHEMA, ECZEMA, AND PSORIASIS

was the title of a paper by DR. GEORGE H. FOX of New York. The contention was made that seborrhea, as such, had no place in modern nomenclature; that the pityriasis group includes, or should include, many scaly or oily affections known under various other names. It was thought that some simple term to correspond to "acne" "eczema," and "psoriasis" would do away with much present confusion. The term pityriasis, he thought, would cover many conditions of skin lesion now grouped elsewhere, and to illustrate this point a series of prints were exhibited showing the great resemblance between them, as well as between this whole class of affections and psoriasis. Pityriasis rosea had been included by Dr. Fox in the scaly affections which he would class together. This had given rise to almost unanimous opposition, since it was claimed that this affection stands out by itself with distinctive features, and can be readily diagnosed at a glance in almost every instance.

It was admitted that many clinical symptoms seem to merge and confuse, but efforts should be directed toward differentiation of similar, but still distinct, diseases, instead of taking a step backward, as it would seem to be, in grouping them together. One point made was that

seborrheal affections are persistent, while pityriasis rosea is evanescent.

DR. DUHRING said he recognized several of this class of affections as distinct. There was (1) pityriasis rosea, of which there may be an acute and a chronic form, the latter lasting as long as a year. These may or may not recur. (2) Seborrhea, which may attack any region of the body. (3) An eczema, which may be complicated by seborrhea, and for which the term "eczema seborrhoeicum" may be retained. Other diseases may simulate these. The term pityriasis, as proposed by Dr. Fox, must be more clearly defined before it can be accepted to cover the group of affections as proposed.

DR. H. G. KLOTZ read a paper, entitled

STRONG APPLICATIONS OF THE ICHTHYOL GROUP.

He found that in acute inflammatory states, as well as in more chronic processes, a judicious use of strong solutions is often of much benefit. Stress was laid upon the contracting power over the vessels exerted by ichthyol, especially in erysipelas. To this, no less than to the antiseptic qualities of the drug, is due its favorable action. It is very useful in ivy poisoning, dermatitis, and a variety of other acute inflammations, including the dermatitis caused by burns, freezing, scratching; in intertrigo eczema, zoster, and the erythemata. In chronic processes and inflammations the effects are still more marked. It is usually not necessary to combine any varnish or colodion with the drug, since it forms in itself a sufficient protective.

A paper, entitled

A CONTRIBUTION TO THE ETIOLOGY OF CONGENITAL ICHTHYOSIS, WITH ABSENCE OF THE THYROID,

was read by DR. JAMES M. WINFIELD.

After giving the family history, the paper entered into the history of the mother. She had been pregnant seven times, four children being normal and two ichthyotic. During the first, second, third, fourth, and sixth pregnancies the mother's condition was excellent. During the fifth, which resulted in the first ichthyotic infant, she was subjected to considerable anxiety, and at the sixth month received a severe nervous shock. When she became pregnant for the last time, she immediately grew exceedingly nervous and worried lest she should become the mother of another deformed baby. At delivery the infant weighed four pounds. The body was enveloped in what appeared to be a thick coating of vernix caseosa, which, on removal, left the skin red and shiny. If no lubricating protective was used, the whole cutaneous surface soon became scaly and fissured. Four days after delivery the infant appeared as follows: The whole body was covered with thick, reddish-brown, epidermic plates, which were larger and more marked over the extensor surfaces; some of them were from a sixteenth to a tenth of an inch in thickness, and a half to two inches in diameter. Between the plates were fissures of varying depths. Movement of the limbs produced cracks about the flexures of the joints, which extended deeply into the underlying tissues.

The autopsy was made about eight hours after death.

The body was considerably emaciated and covered with large, fatty, epidermic scales. On examining the neck, the thyroid gland was found to be absent. There was no sign or trace of its ever having existed.

The important etiological points are: (1) the absence of the thyroid gland; (2) the presence of micro-organisms in and about the lymph spaces.

Just what etiological bearing the absence of the thyroid has on the production of ichthyosis congenita and kindred diseases cannot be positively stated without further clinical and *post-mortem* study. Still, from the above facts, it is but fair to conclude that, in this case at least, the absence of this gland had some marked effect on the nutrition of the skin and the development of the cutaneous affection.

The occurrence of micro-organisms in the lymph spaces at once brings up the question whether this and similar cases are types of true ichthyosis or, as Dr. Van Cott puts it, a variety of dermatitis.

If these micro-organisms were the cause of this excessive plate formation, it is possible that the term ichthyosis sebacea is the correct one, for a bacterial irritation could easily produce a universal seborrhea.

HEREDITARY AND CONTINUOUS SHEDDING OF THE FINGER-NAILS

was the title of a paper presented by DR. D. W. MONTGOMERY of San Francisco.

A case was described in which, without evidence of disease of the nail itself, this appendage was thrown off at longer or shorter intervals during the subject's whole life. His mother and an uncle on her side had been similarly affected. The nail began to loosen in the region of the matrix, the loosening process gradually extending forward toward the free border. Corresponding nails upon the opposite side would be simultaneously affected, and after an interval the remaining nails would follow in the same manner. It was the only case in literature, so far as the reader knew, where such continuous loss of nails had occurred.

SYMMETRICAL ATROPHY OF THE SKIN; REPORT OF A CASE, WITH COLORED DRAWINGS AND PHOTO-MICROGRAPHS.

DR. J. A. FORDYCE of New York City reported such a case which occurred in a woman aged forty years. The hands, elbows, knees, and ankles were the seat of atrophic lesions, which were surrounded by a dusky red zone of dilated capillaries. The atrophy followed closely on the hyperemia, which seemed to be the primary condition. Clinically, the affection resembled the cases described by Buchwald, Pospelow, Touton, Bronson, and others. The eruption was absolutely symmetrical and had, up to a short time before, been progressive. On microscopic examination, the atrophy was found to be secondary to an inflammation which was located in the skin and underlying connective tissue. The epidermis was invaded by exudation corpuscles, which had produced a thinning and degeneration of the constituent cells. No organic affection of the nervous system could be detected, although there was evidence of vasomotor disturbance.

A PECULIAR AFFECTION OF THE HAIR-FOLLICLE

was the title of a paper read by DR. JOSEPH GRINDON of St. Louis.

The affection consists of a chronic inflammation of the hair-follicle, characterized by extrusion of a portion of the root sheath proper *en masse*, which remains threaded over the hair and is carried up with it in its growth, the process being repeated from time to time until successive masses bearing a superficial resemblance to nits are strung along the hair. It is accompanied by slight redness about the mouth of the follicle, and results in a curable alopecia.

There are found little grayish-white masses threaded beadwise on the hair. In their size, color, and distribution they are so like the ova of the pediculous capitis that one is almost certain to mistake them for the latter at first sight.

The little masses consist of the cells of both layers of the internal root sheath surrounded by a layer of amorphous detritus and sebum.

DR. ALLEN presented

A SCALE OF MEASUREMENTS FOR THE ACCURATE AND UNIFORM DESCRIPTION OF CUTANEOUS LESIONS, OF UNIVERSAL ADAPTABILITY.

He thought the desirability of a uniform system of description which might be followed by dermatologists in all countries need not be dwelt upon.

The unit upon which this scale is drawn is one-quarter of a millimeter. Five hundred is the largest size shown on the scale, but larger plaques, tumors, etc., may be readily described in multiples of this diameter. The scale numbers can be reduced to millimeters if desired by dividing by four. Thus, No. 40 is ten millimeters, or one centimeter in diameter. The term *tetmil* is proposed to designate the unit. It is especially in the smaller sizes that accuracy is often of the utmost importance in describing the primary lesions of a disease.

The method now employed to denote the relative size of lesions is too inaccurate, unsatisfactory, and unscientific. After discussion, it was voted to refer the subject to the committee on nomenclature. It was also decided that the Association should present a scheme such as that proposed at the coming International Dermatological Congress.

The meeting then adjourned to meet in or near New York City on the first Tuesday in June, 1898.

The officers elected for the ensuing year were: J. N. Hyde of Chicago, president; E. B. Bronson of New York, vice-president; J. T. Bowen of Boston, secretary.

AMERICAN OTOLOGICAL SOCIETY.

Thirtieth Annual Meeting, Held at Washington, D. C., May 4, 1897.

The President, DR. ARTHUR MATHEWSON of Brooklyn, in the Chair.

AFTER the disposal of the usual executive business DR. A. H. BUCK of New York opened the scientific proceedings by reading a paper on

GOUTINESS IN ITS RELATIONS TO DISEASES OF THE EAR.

After directing attention to the absence of references in literature to this subject, Dr. Buck expressed the opinion that gout would be found to be a more considerable factor in a certain class of affections of the ear, than had hitherto been suspected. He spoke of the ease with which spontaneous stagnation of the blood current could occur in parts of the auditory apparatus, as favorable to the interference of uric-acid irritation, and illustrated the subject by the introduction of the history of several cases calculated to show the vicious circle which can only be broken by measures addressed to the general condition. The paper received marked attention, and the discussion brought out only one or two differences of opinion on minor details.

DR. E. B. DENCH's paper on

THE DIFFERENTIAL DIAGNOSIS BETWEEN DISEASES OF THE SOUND-CONDUCTING AND SOUND-PERCEIVING APPARATUS,

stated that physical inspection of the ear cannot be relied upon to show the state of the hearing. He divided the affections of the hearing into two parts, those dependent upon interference (1) with the conducting and (2) with the perceiving apparatus. Quantitative audition is determined by noises, while qualitative audition is measured by musical tones. A description of the results obtained by the use of the tuning forks was followed by the statement that in disease of the conducting apparatus the lower tones are always lost first, while in affections of the sound-perceiving apparatus the lower tones are not lost. In conducting defect the high tones are good whereas in perceptive difficulty they are lost. An explanation of the reason why this should be so followed. In disease of the sound-conducting apparatus bone conduction is always exaggerated, but in mixed cases where the impairment is extreme air conduction is better than bone except for the very lowest notes.

The discussion of the paper was participated in by DRS. S. THEOBALD of Baltimore and H. A. ALDERTON of Brooklyn who had been puzzled by the varying results obtained with the tuning forks on the vertex and on the mastoid; and by DR. CLARENCE J. BLAKE of Boston, who explained that the variations complained of were doubtless due to varying thicknesses of the skull at different points even in the same subject.

DR. W. P. EAGLETON of Newark read a short paper on

EAR COMPLICATIONS OF INFLUENZA,

and gave statistics showing the relative virulency. This was followed by one by DR. GORHAM BACON of New York on

IMPORTANT SYMPTOMS INDICATING OPERATION IN MASTOID DISEASE.

He had never seen a case without some elevation of temperature, but the temperature may range lower in adults than in children. High temperature is not necessarily indicative of extensive disease. In determining tenderness, pressure should always be made over the fellow mastoid

for comparison. Redness and edema over the mastoid are not so necessary and not to be waited for. Bulging of Shrapnell's membrane is always an indication for opening the mastoid cells. Sometimes the temperature remains high after operation.

DRS. W. B. JOHNSON of Paterson, DENCH and J. O. TANSLEY of New York participated in the discussion which followed. The opinion was advanced that the continued high temperature after operation may be due to infection of the newly incised and exposed surfaces; differences of opinion developed as to whether inflation after incision of the membrane in acute cases was dangerous or the reverse. Dr. Bacon only politizes when the inflammation has practically subsided and there is a free opening in the membrane.

DR. H. A. ALDERTON of Brooklyn, in a paper on

A CASE OF THROMBOSIS OF THE LATERAL SINUS,

accompanied by a specimen, raised the question as to the advisability of ligating the jugular to prevent extension of the septic condition. One point of interest in the case reported is that the sinus was in front of the antrum, and when evacuated of debris temporary improvement occurred, but a day later metastatic pneumonia set in with death four or five days later.

DRS. DENCH and BACON did not think it always necessary or advisable to ligate the jugular vein, and thought that in many cases the extension of the sepsis was arrested as soon as the septic material and thrombus was removed.

DR. GORHAM BACON related the details of a case of extreme deafness in which great improvement of hearing followed the use of pilocarpin hypodermatically, and expressed the opinion that the want of success in many cases may be due to the shortness of the period of treatment.

DR. TANSLEY suggested that the length of treatment was an obstacle in some cases, and thought as good results had been achieved when administered by the mouth. Other speakers concurred with Dr. Bacon in thinking that pilocarpin by the stomach had not shown anything like the happy results obtained hypodermatically.

DR. J. OSCROFT TANSLEY described

A NEW OPERATION FOR DEVIATED SEPTUM,

which consisted in converting the septum into a spur by folding it upon itself, then at a second sitting ten days later removing the spur.

DR. ROBERT C. MYLES of New York read a short paper on

CICATRICAL BANDS IN THE NEIGHBORHOOD OF THE FOSSA OF ROSENMULLER, SIMULATING STENOSIS OF THE EUSTACHIAN TUBE,

which he had found easy to remedy by breaking up the bands with the finger, resulting in immediate improvement in hearing.

DR. J. E. H. NICHOLS exhibited an electric speculum with head band, operated by storage battery, which gave perfect light to the ear and left both hands free for manipulations.

REVIEWS.

A SYSTEM OF PRACTICAL MEDICINE. By American authors. Edited by ALFRED LEE LOOMIS, M.D., LL.D., late Professor of Pathology and Practical Medicine in the New York University, and WILLIAM GILMAN THOMPSON, M.D., Professor of Materia Medica, Therapeutics, and Clinical Medicine in the New York University; Physician to the Presbyterian and Bellevue Hospitals, New York. Volume I. *Infectious Diseases.* New York and Philadelphia: Lea Brothers & Co., 1897.

It is unfortunate that the late Dr. Loomis could not live to see the publication of this work on which he had long been engaged and which, in many respects, will form one of the best systems of medicine published in this country. There certainly must be an active demand for collaborative works of this nature, for the last two years has seen the appearance of several systems devoted to internal medicine. It is not saying too much to express the belief that the one under consideration will at once assume a rank at once gratifying to the publishers and the authors.

The present volume on the infectious diseases is scientific, complete, and direct. The articles do not possess, however, a character so deep, no reasoning so abstruse, that their reading is burdensome. All of the chapters are written by men whose verdicts are regarded as authoritative, and their dicta may, therefore, be accepted as conclusive. It is of great value, too, to know that statements are made with some show of authority, and that they are based upon actual knowledge and experience rather than upon a collection of facts from literature with a verdict wavering with each author cited.

It is almost impossible to review critically each of the articles in this volume. Every chapter contains an historical account of the disease with which it deals, followed by the etiology, the morbid anatomy, the differential diagnosis, diagnosis, complications, the prognosis, and the treatment. The practical value of the work is much enhanced by the attention given to the consideration of the diagnosis, differential diagnosis, and treatment. Thus twenty-four pages are devoted to the treatment of typhoid fever, and twenty-eight to the treatment of diphtheria, including an exhaustive account of the antitoxin results. The author, by the way, praises the use of the antitoxin serum.

All of the chapters, it has been said, have been written by most competent observers. It would, therefore, be unjust to institute comparisons. Yet the chapters on malaria, yellow fever, typhoid fever, tuberculosis, and erysipelas seem to us to be particularly well conceived. Unless it be Monnaberg's or Thayer and Hewetson's monograph, we know of no clearer, more complete, and more logical exposition of the subject of malaria than is contained in this volume. Although the articles mentioned seem to bear the stamp of authority perhaps more markedly than some of the others, the implication of inferiority is by no means intended. The volume stands as a model of literary and scientific excellence, and we expect, therefore, to see it occupy the prominence it

deserves among the books of the year. It is reasonable to infer that the succeeding volumes will have as high a standard.

The proof-reading and editing are above reproach. The book is handsomely printed on heavy paper, is splendidly illustrated, and is excellent in the style and color of its binding.

THE YEAR-BOOK OF TREATMENT FOR 1897: A Critical Review for Practitioners of Medicine and Surgery. Philadelphia and New York: Lea Brothers & Co., 1897.

THIS year-book is so widely known as to require merely the announcement of its publication for the current year. Its twenty-six contributors are mainly specialists whose critical examination of the literature of the past year makes the work of the greatest value to one whose desire is to keep abreast of what is being accomplished in the ever-widening fields of medicine. All the advances made in the last year in the provinces of medicine and surgery are here faithfully recorded and reviewed by critical experts, and the present volume will, we are sure, reach the same measure of success as its predecessors.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. For the use of Students and Practitioners. By J. NEVINS HYDE, A.M., M.D., Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago, and FRANK H. MONTGOMERY, M.D., Lecturer on Dermatology and Venereal Diseases, Rush Medical College, Chicago. New (fourth) edition. In one octavo volume of 815 pages, with 110 engravings and 12 full-page plates, 4 of which are colored. Cloth, \$5.25; leather, \$6.25. Philadelphia and New York: Lea Brothers & Co., Publishers.

"GOOD wine needs no bush"; no more does a book in its fourth edition need the commendation of the reviewer, for the great public has already passed its verdict. In the present instance the author and his publishers deserve congratulations upon the success achieved, for the work of both has been most excellently done and is in every way reliable and satisfactory.

The new chapters contained in this fourth edition are a valuable addition, and not a few of those with which we were familiar have been entirely rewritten and brought up to date. Among the former are included chapters on Conglomerate Pustular Perifolliculitis, Dermatitis, Seborrhoeum, Epidermolysis Bullosa Hereditaria, Erysipeloid, Erythema Induratum, Hidradenitis Suppurativa, Hydrocystoma, and Lichenification, but we have failed to find mention made of Baelzer's Disease, Cheilitis, Glandularis, or Porokeratosis. Several new plates and wood-cuts have been added. We note also that the simplified system of spelling has been adopted, as in nevus, hyperesthesia, myxedema, and the like, but the convictions of the orthographer have not given him courage to follow the same plan with reference to edema.

As has been said, the book is thoroughly deserving of its success, and there can be no doubt that it will pass through many succeeding editions.

A MANUAL OF VENEREAL DISEASES. By JAMES R. HAYDEN, M.D., Chief of Venereal Clinic at the College of Physicians and Surgeons (Columbia University), New York. Philadelphia and New York: Lea Bros. & Co., 1896.

THIS little manual is an excellent practical exposition of treatment, and is designed especially for students of Venereal Diseases. There is happily in this book none of the exploitation of useless and dangerous fads in the abortion of and treatment of gonorrhea with which we are often bored. Brought up in a conservative school, Dr. Hayden's teachings are judicious and conservative. In a short space much good information is conveyed as to the treatment of all of the manifestations and sequelæ of gonorrhea.

The subject of chancroid is well handled in every particular, and the description of syphilis is concise and graphic. While more works of this character are abortive and unsatisfactory, this one is sound in doctrine and practice and quite full of good therapeutic suggestions.

CLINICAL LECTURES ON MENTAL DISEASES. By THOMAS S. CLOUSTON, M.D., F.R.C.P.E., Lecturer on Mental Diseases in the University of Edinburgh. Fourth Edition, thoroughly revised; fifteen full-page plates. With Folsom's Laws of the United States on the Custody of the Insane. New York and Philadelphia: Lea Brothers & Co., 1897.

PERHAPS no work on mental diseases by any English author has been so popular as that of Clouston. This popularity is certainly deserved, for the author has put into a colloquial form all the important data relating to the diagnosis, care, and treatment of the various forms of mental disease. The work is avowedly intended as an aid to teaching the fundamental and essential features of insanity. No plan perhaps could have been better devised than the one used by the author for this purpose.

With the greater activity in all pursuits, with the greater keenness of competition in the struggle for life, with the greater segregation of people in the cities, with the increased demands on mental work, in fact with the evolution of civilization, the weaker minds, those unable to stand the strain imposed, are the first to suffer. Insanity is hence on the increase and especially so in the large cities, where all these factors are more extensively at work.

It is the general practitioner whose counsel is first invoked when cases of mental disturbance occur. He should be qualified to detect insanity when it manifests itself, for much of the subsequent result of the case will depend on whether the mental disease has been recognized early. To the general practitioner this work must appeal. For the general features of each form of mental disease are so succinctly given, the clinical picture so adequately and graphically described, that they require no study to impress them on the memory. Clouston certainly deserves the thanks of the profession for this, if for no other reason, that he has removed from the study of mental disease much of the admixture of excessive meta-

physical psychology which formerly burdened English psychiatric science which made the study of psychiatry so distasteful to the general practitioner. He has given to the profession at large a work which is easily understood and which adequately details all the knowledge which a physician need have to qualify him to speak authoritatively on any case which might arise in his professional work.

The method of presenting the various types of insanity adopted by Dr. Clouston is very felicitous. He has utilized the form of lectures, arranging each on a systematic plan. He introduces each by a careful résumé of the subject therein contained. He then goes into the description and clinical features and concludes with a discussion of the prognosis and of the treatment.

The book contains many histories of cases explanatory of the various forms described, making not only very interesting reading, but presenting instructive object lessons.

The work of the publishers is above reproach.

THE TONIC TREATMENT OF SYPHILIS. By E. L. KEYES, A.M., M.D., New York: D. Appleton & Co., 1896.

THIS brochure of seventy-five pages is in no sense a thorough revision of its predecessor of more than twenty years ago, nor can it under any circumstances be considered an up-to-date exposition of the treatment of syphilis. It is simply a repetition of the author's views which have not been accepted by any distinguished syphilographer, nor strange to say, have they been at all changed or modified in all these years although so much of real value has been added to our stock of knowledge on this subject.

MITTEILUNGEN AUS DEN GRENZGEBIETEN DER MEDIZIN UND CHIRURGIE. Erster Band; Drittes Heft. Jena: Gustav Fischer, 1896.

THIS volume bears out the general high standard offered thus far by the editor. Among the articles is one by D. V. Bandler, showing that chloroform produces fatty degeneration of the liver, while ether does not. Von Jacksh states as his opinion that the treatment of malignant tumors by erysipelas serum (Emmerich-Scholl) is dangerous and useless. The remaining articles deal mainly with surgical topics of less interest to the general reader.

THE RETROSPECT OF MEDICINE. Edited by JAMES BRAITHWAITE, M.D., assisted by E. F. TREVELYAN, M.D., B.Sc., M.R.C.P., Vol. 114, July-December, 1896. London: Simpkin, Marshall, Hamilton, Kent & Co., Limited, 1897.

It is needless to do more than merely call attention to this volume of Braithwaite's Retrospect, the standard work of its kind, which is found in the libraries of medical men the world over. The classification of subjects is the one usually followed in this work, and contains a review of the main contributions to medical literature during the last six months.